

09/743483

(FILE 'HOME' ENTERED AT 10:45:56 ON 05 JUL 2001)

FILE 'REGISTRY' ENTERED AT 10:46:03 ON 05 JUL 2001
L1 STRUCTURE UPLOADED
L2 9 S L1

FILE 'CAPLUS' ENTERED AT 10:47:22 ON 05 JUL 2001

FILE 'REGISTRY' ENTERED AT 10:47:36 ON 05 JUL 2001
L3 234 S L1 SSS FULL

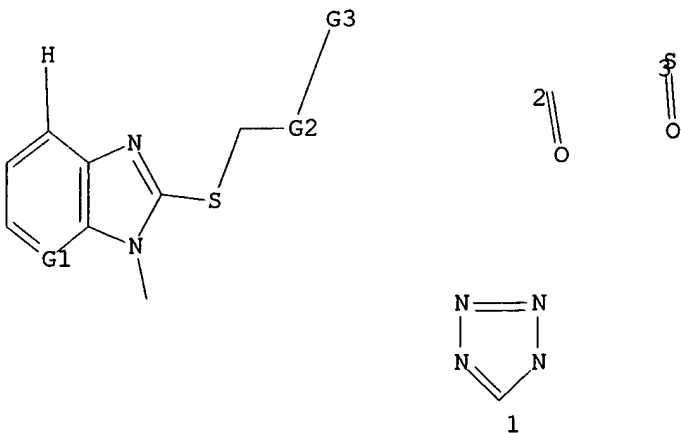
FILE 'CAPLUS' ENTERED AT 10:48:01 ON 05 JUL 2001
L4 21 S L3

FILE 'BEILSTEIN' ENTERED AT 10:51:01 ON 05 JUL 2001
L5 1 S L1
L6 20 S L1 SSS FULL
L7 0 S L6 AND PY<1973

=> d l1

L1 HAS NO ANSWERS

L1 STR



G1 C,N

G2 Cy,Ak

G3 [C1], [C2], [C3]

09/743483

L4 ANSWER 1 OF 21 CAPLUS COPYRIGHT 2001 ACS

AN 2000:196050 CAPLUS

DN 133:17422

TI Combinatorial Liquid-Phase Synthesis of Structurally Diverse
Benzimidazole

Libraries

AU Yeh, Chih-Ming; Tung, Chieh-Li; Sun, Chung-Ming

CS Taiwan

SO J. Comb. Chem. (2000), 2(4), 341-348

CODEN: JCCHFF; ISSN: 1520-4766

PB American Chemical Society

DT Journal

LA English

OS CASREACT 133:17422

AB An expedient liq.-phase synthesis for construction of diverse
benzimidazole libraries is described. Nucleophilic aryl substitution of
poly(ethylene glycol)-supported 4-fluoro-3-nitrobenzoic acid with several
primary amines under basic conditions, followed by Zn/NH₄Cl mediated
nitro

group redn., gave the PEG bound diamines. Subsequent cyclization of the
immobilized o-phenylenediamines using thiocarbonyldiimidazole or
thiophosgene in dichloromethane furnished benzimidazole-2-thiones.
Treatment of these with alkyl halides and benzylic halides in the

presence

of triethylamine provided 1-substituted 2-alkylthio-5-
carbamoylbenzimidazoles on the support. The desired products were

severed

from the PEG under mild conditions in high yield and high purity.

IT 246226-36-8P

RL: SPN (Synthetic preparation); PREP (Preparation)

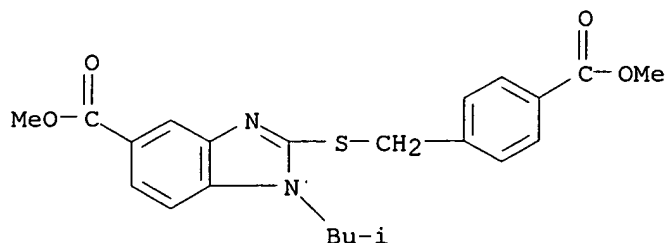
(combinatorial liq.-phase synthesis of benzimidazole libraries)

RN 246226-36-8 CAPLUS

CN 1H-Benzimidazole-5-carboxylic acid,

2-[[[4-(methoxycarbonyl)phenyl]methyl]

thio]-1-(2-methylpropyl)-, methyl ester (9CI) (CA INDEX NAME)



RE.CNT 40

RE

(1) Al-Muhaimeed, H; Int Med Res 1997, V25, P175 CAPLUS

(3) Beck, J; Bioorg Med Chem Lett 1999, V9, P967 CAPLUS

(4) Blettner, C; J Org Chem 1999, V64, P3885 CAPLUS

(6) Booth, S; Tetrahedron 1998, V54, P15385 CAPLUS

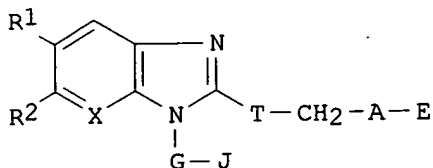
(7) Cereda, E; Eur J Med Chem 1987, V22, P527 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

09/743483

L4 ANSWER 2 OF 21 CAPLUS COPYRIGHT 2001 ACS
AN 2000:68436 CAPLUS
DN 132:107952
TI Preparation of thiobenzimidazole derivatives as chymase inhibitors
IN Matsumoto, Yoshiyuki; Takeuchi, Susumu; Hase, Naoki
PA Teijin Limited, Japan
SO PCT Int. Appl., 103 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000003997	A1	20000127	WO 1999-JP3799	19990714
	W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	AU 9946519	A1	20000207	JP 1998-200250 A	19980715
				AU 1999-46519	19990714
				JP 1998-200250 A	19980715
				WO 1999-JP3799 W	19990714
	EP 1097926	A1	20010509	EP 1999-929832	19990714
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
				JP 1998-200250 A	19980715
				WO 1999-JP3799 W	19990714
	NO 2001000193	A	20010112	NO 2001-193	20010112
				JP 1998-200250 A	19980715
				WO 1999-JP3799 W	19990714
OS	MARPAT 132:107952				
GI					



AB The title compds. I [T = S(O)m; R1, R2 = H, halo, etc.; A = single bond, etc.; E = CO2R3, etc.; R3 = H, alkyl; G = alkylene; further details on G are given; m = 0 - 2; J is, for example, aryl, etc.; extensive details on J are given] are prepd. Compds. of this invention in vitro showed IC50 values of 10 nM to 100 nM against chymase. A formulation is given.

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IT 255396-37-3P 255396-38-4P 255396-39-5P
255396-40-8P 255396-41-9P 255396-42-0P
255396-43-1P 255396-44-2P 255396-45-3P
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RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP

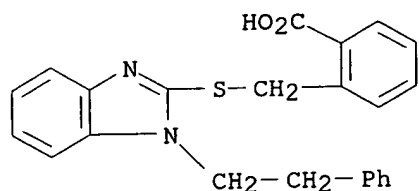
09/743483

(Preparation); USES (Uses)

(prepn. of thiobenzimidazole derivs. as chymase inhibitors)

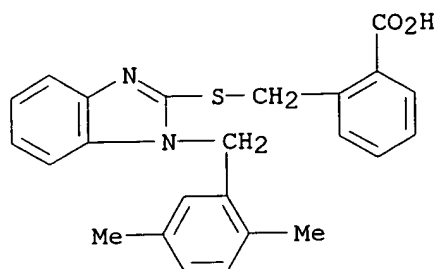
RN 255396-37-3 CAPLUS

CN Benzoic acid, 2-[[[1-(2-phenylethyl)-1H-benzimidazol-2-yl]thio]methyl]-
(9CI) (CA INDEX NAME)



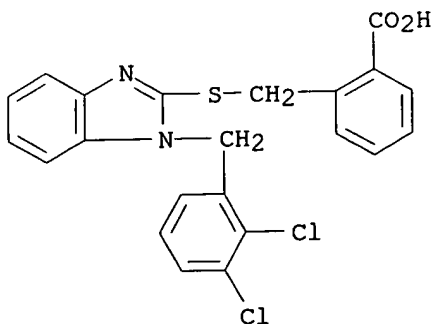
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CN Benzoic acid, 2-[[[1-[(2,5-dimethylphenyl)methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255396-39-5 CAPLUS

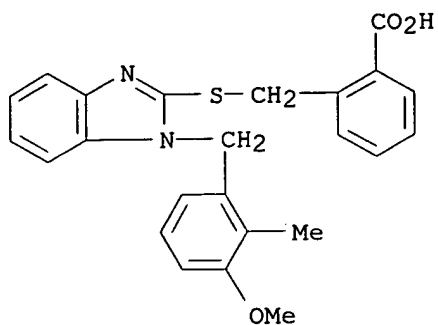
CN Benzoic acid, 2-[[[1-[(2,3-dichlorophenyl)methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255396-40-8 CAPLUS

CN Benzoic acid, 2-[[[1-[(3-methoxy-2-methylphenyl)methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

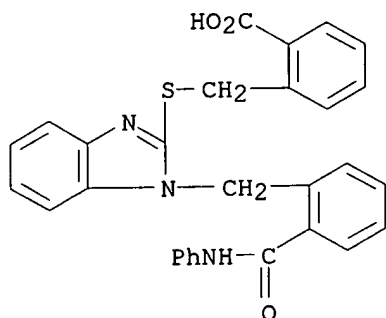
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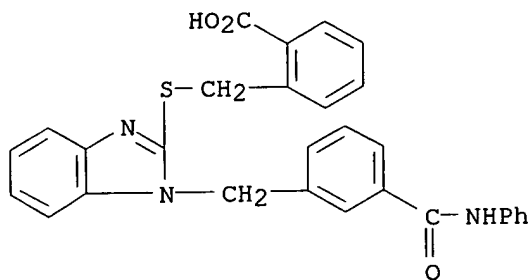
574/395

548/367.1

RN 255396-41-9 CAPLUS
CN Benzoic acid, 2-[[[1-[[2-[(phenylamino)carbonyl]phenyl]methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

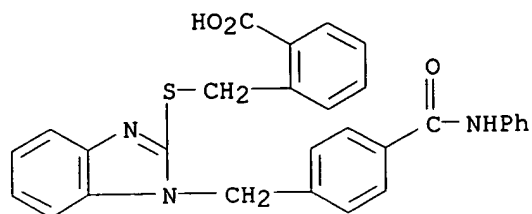


RN 255396-42-0 CAPLUS
CN Benzoic acid, 2-[[[1-[[3-[(phenylamino)carbonyl]phenyl]methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

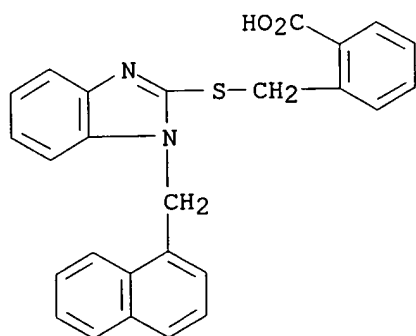


RN 255396-43-1 CAPLUS
CN Benzoic acid, 2-[[[1-[[4-[(phenylamino)carbonyl]phenyl]methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

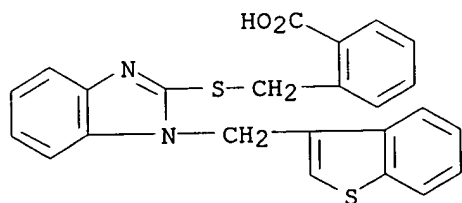
09/743483



RN 255396-44-2 CAPLUS
CN Benzoic acid, 2-[[[1-(1-naphthalenylmethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255396-45-3 CAPLUS
CN Benzoic acid, 2-[[[1-(benzo[b]thien-3-ylmethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

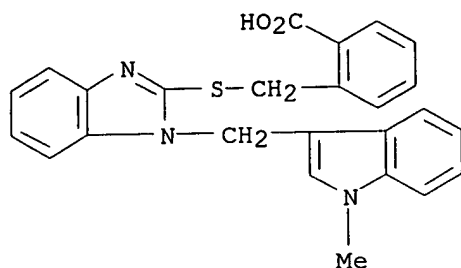


548/305.1
514/395

RN 255396-46-4 CAPLUS
CN Benzoic acid, 2-[[[1-[(1-methyl-1H-indol-3-yl)methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

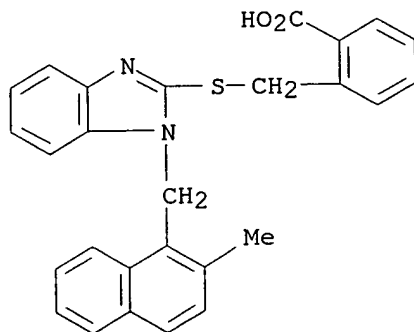
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514/395

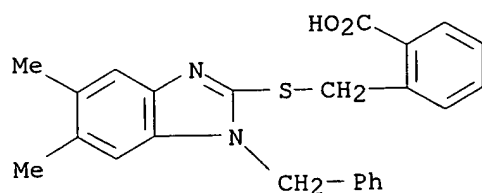


548/
305.1

RN 255396-47-5 CAPLUS
CN Benzoic acid, 2-[[[1-[(2-methyl-1-naphthalenyl)methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

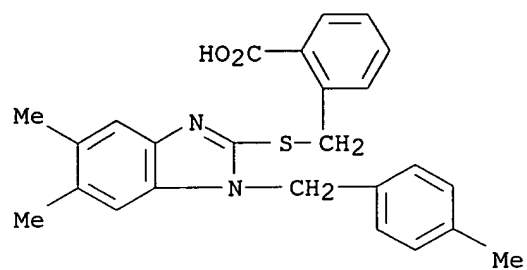


RN 255396-48-6 CAPLUS
CN Benzoic acid, 2-[[[5,6-dimethyl-1-(phenylmethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

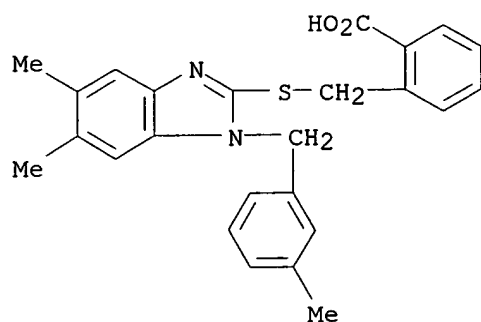


RN 255396-49-7 CAPLUS
CN Benzoic acid,
2-[[[5,6-dimethyl-1-[(4-methylphenyl)methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

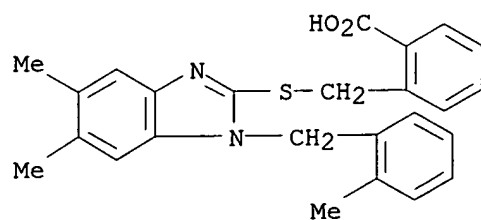
09/743483



RN 255396-50-0 CAPLUS
CN Benzoic acid,
2-[[[5,6-dimethyl-1-[(3-methylphenyl)methyl]-1H-benzimidazol-
2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

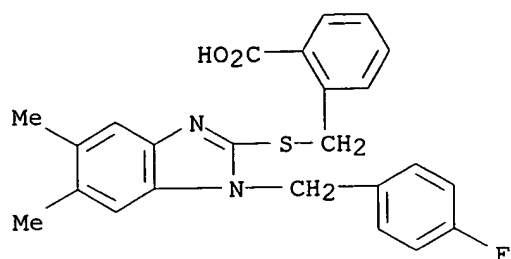


RN 255396-51-1 CAPLUS
CN Benzoic acid,
2-[[[5,6-dimethyl-1-[(2-methylphenyl)methyl]-1H-benzimidazol-
2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

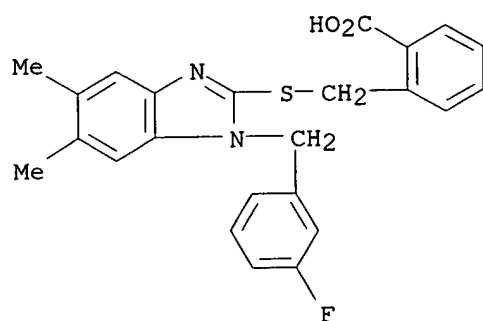


RN 255396-52-2 CAPLUS
CN Benzoic acid,
2-[[[1-[(4-fluorophenyl)methyl]-5,6-dimethyl-1H-benzimidazol-
2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

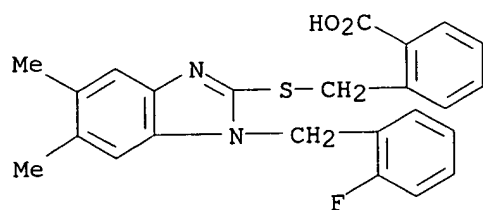
09/743483



RN 255396-53-3 CAPLUS
CN Benzoic acid,
2-[[[1-[(3-fluorophenyl)methyl]-5,6-dimethyl-1H-benzimidazol-
2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

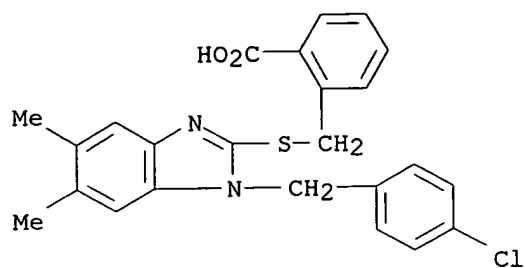


RN 255396-54-4 CAPLUS
CN Benzoic acid,
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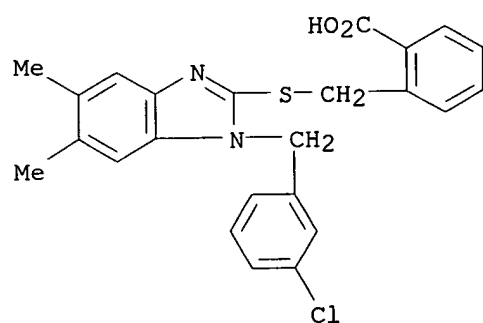


RN 255396-55-5 CAPLUS
CN Benzoic acid,
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2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

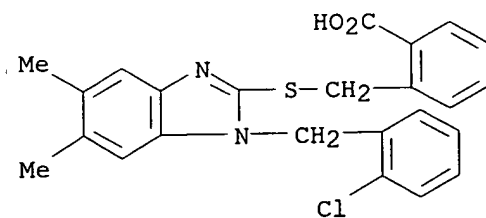
09/743483



RN 255396-56-6 CAPLUS
CN Benzoic acid,
2-[[[1-[(3-chlorophenyl)methyl]-5,6-dimethyl-1H-benzimidazol-
2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

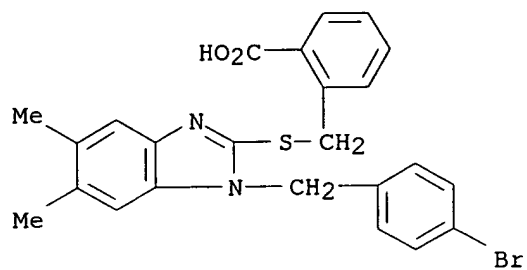


RN 255396-57-7 CAPLUS
CN Benzoic acid,
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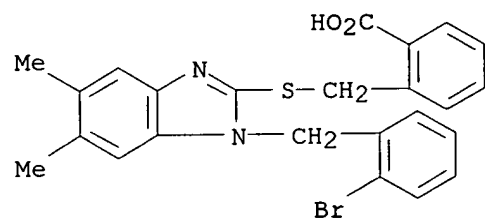


RN 255396-58-8 CAPLUS
CN Benzoic acid,
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2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

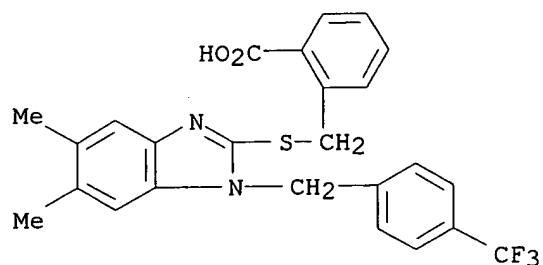
09/743483



RN 255396-59-9 CAPLUS
CN Benzoic acid,
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2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

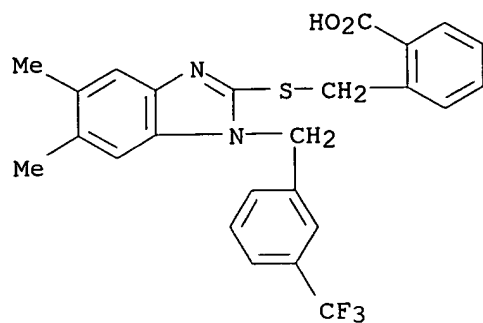


RN 255396-60-2 CAPLUS
CN Benzoic acid, 2-[[[5,6-dimethyl-1-[[4-(trifluoromethyl)phenyl]methyl]-1H-
benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

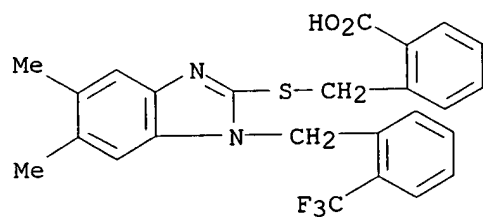


RN 255396-61-3 CAPLUS
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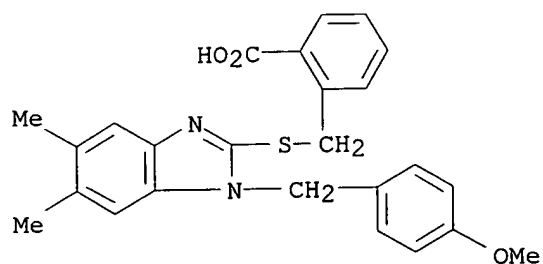
09/743483



RN 255396-62-4 CAPLUS
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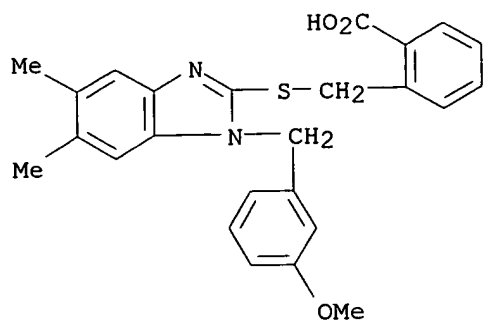


RN 255396-63-5 CAPLUS
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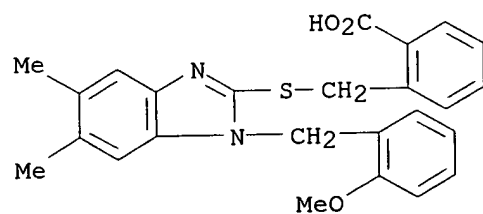


RN 255396-64-6 CAPLUS
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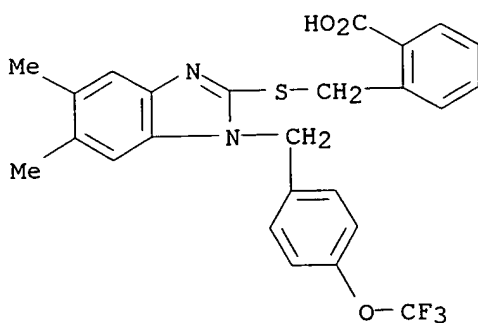
09/743483



RN 255396-65-7 CAPLUS
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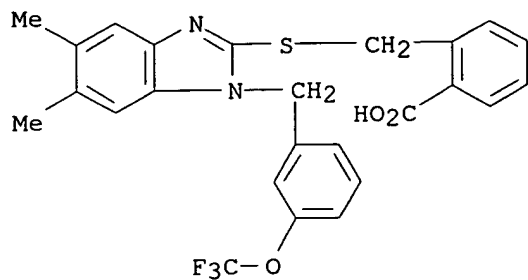


RN 255396-66-8 CAPLUS
CN Benzoic acid, 2-[[[5,6-dimethyl-1-[[4-(trifluoromethoxy)phenyl]methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

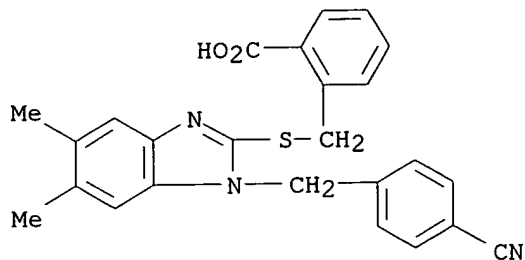


RN 255396-67-9 CAPLUS
CN Benzoic acid, 2-[[[5,6-dimethyl-1-[[3-(trifluoromethoxy)phenyl]methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

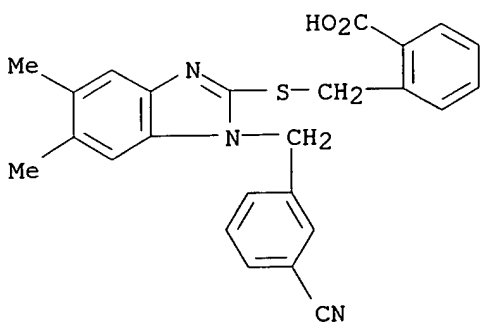
09/743483



RN 255396-68-0 CAPLUS
CN Benzoic acid,
2-[[[1-[(4-cyanophenyl)methyl]-5,6-dimethyl-1H-benzimidazol-
2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

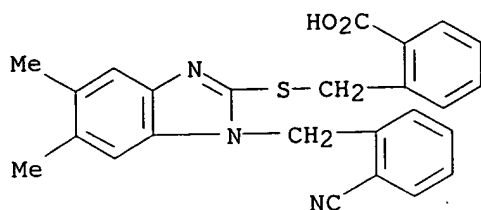


RN 255396-69-1 CAPLUS
CN Benzoic acid,
2-[[[1-[(3-cyanophenyl)methyl]-5,6-dimethyl-1H-benzimidazol-
2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255396-70-4 CAPLUS
CN Benzoic acid,
2-[[[1-[(2-cyanophenyl)methyl]-5,6-dimethyl-1H-benzimidazol-
2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

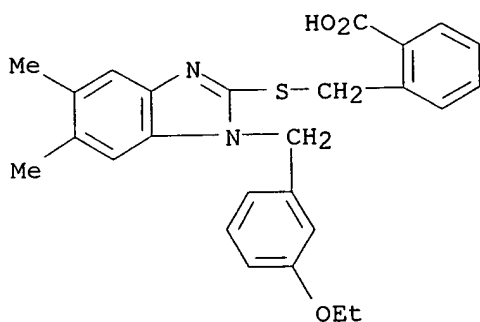
09/743483



RN 255396-71-5 CAPLUS

CN Benzoic acid,

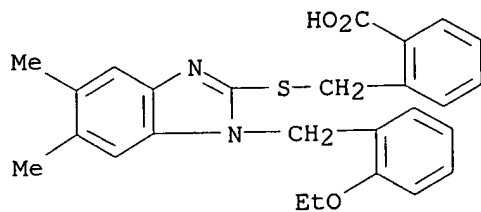
2-[[[1-[(3-ethoxyphenyl)methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255396-72-6 CAPLUS

CN Benzoic acid,

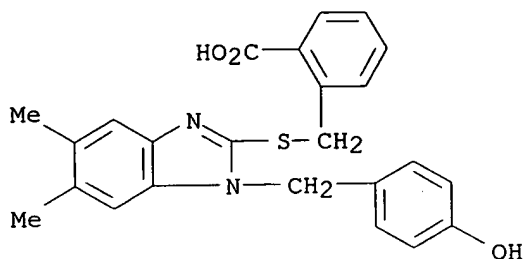
2-[[[1-[(2-ethoxyphenyl)methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



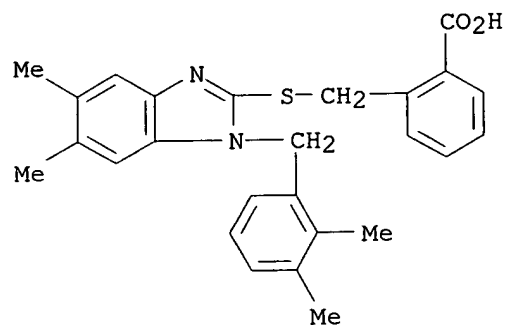
RN 255396-73-7 CAPLUS

CN Benzoic acid, 2-[[[1-[(4-hydroxyphenyl)methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

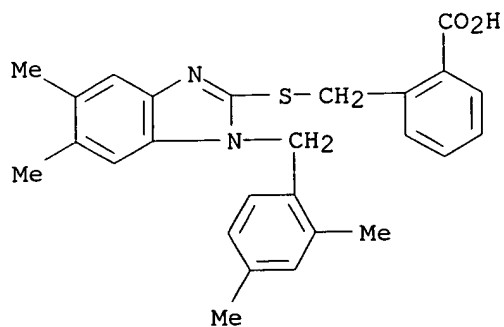
09/743483



RN 255396-74-8 CAPLUS
CN Benzoic acid, 2-[[[1-[(2,3-dimethylphenyl)methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

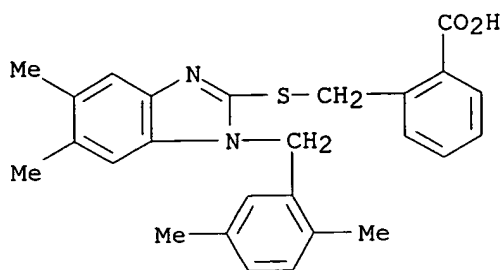


RN 255396-75-9 CAPLUS
CN Benzoic acid, 2-[[[1-[(2,4-dimethylphenyl)methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



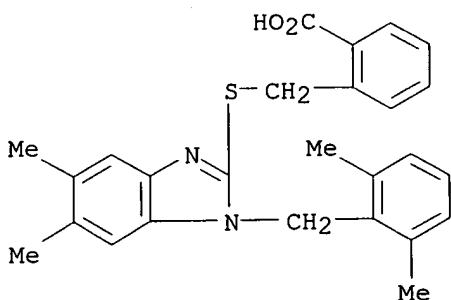
RN 255396-76-0 CAPLUS
CN Benzoic acid, 2-[[[1-[(2,5-dimethylphenyl)methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

09/743483



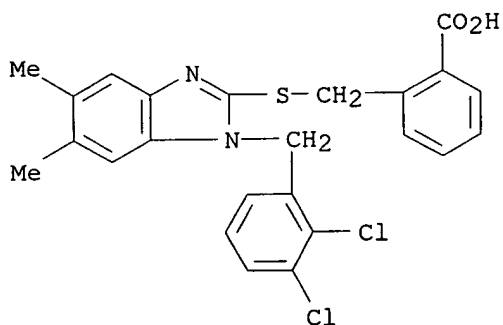
RN 255396-77-1 CAPLUS

CN Benzoic acid, 2-[[[1-[(2,6-dimethylphenyl)methyl]thio]methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255396-78-2 CAPLUS

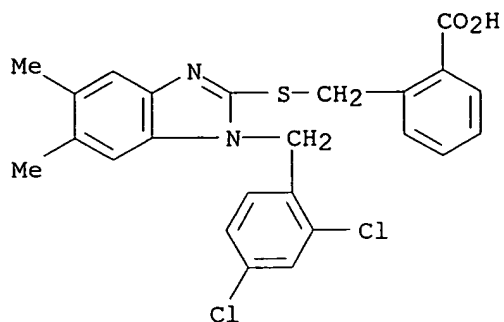
CN Benzoic acid, 2-[[[1-[(2,3-dichlorophenyl)methyl]thio]methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255396-79-3 CAPLUS

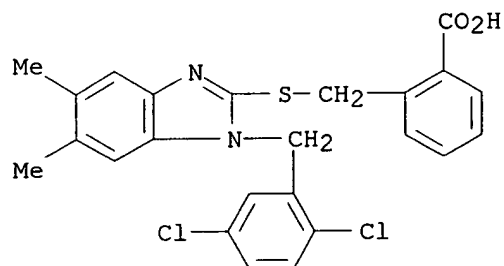
CN Benzoic acid, 2-[[[1-[(2,4-dichlorophenyl)methyl]thio]methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

09/743483



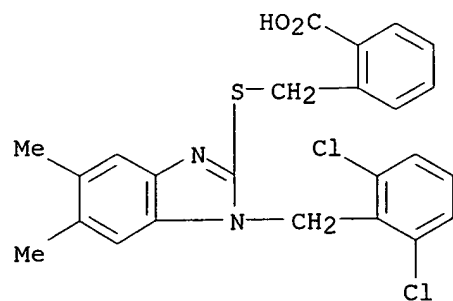
RN 255396-80-6 CAPLUS

CN Benzoic acid, 2-[[[1-[(2,5-dichlorophenyl)methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255396-81-7 CAPLUS

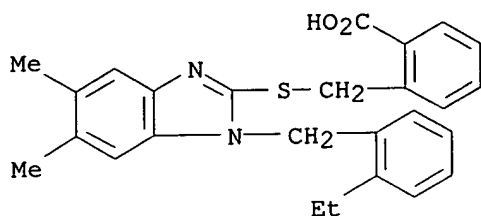
CN Benzoic acid, 2-[[[1-[(2,6-dichlorophenyl)methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255396-82-8 CAPLUS

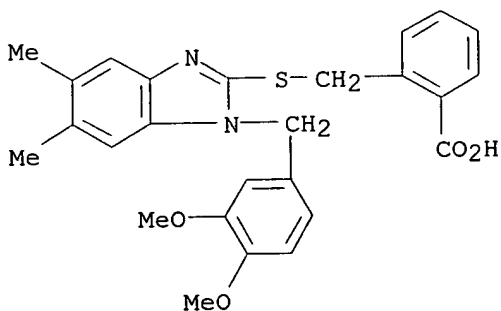
CN Benzoic acid,
2-[[[1-[(2-ethylphenyl)methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

09/743483



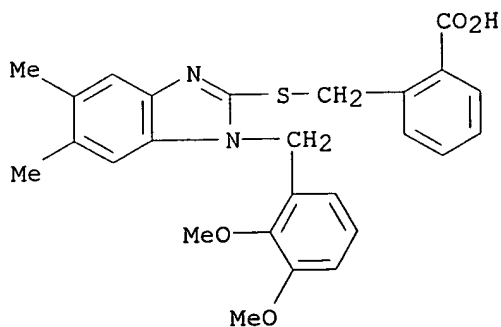
RN 255396-83-9 CAPLUS

CN Benzoic acid, 2-[[[1-[(3,4-dimethoxyphenyl)methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255396-84-0 CAPLUS

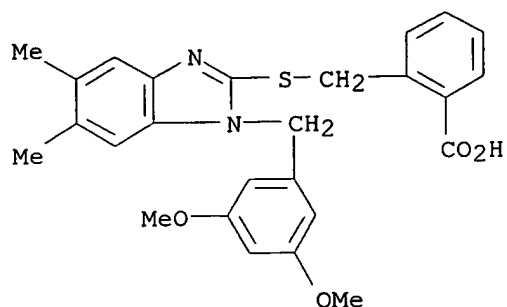
CN Benzoic acid, 2-[[[1-[(2,3-dimethoxyphenyl)methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255396-85-1 CAPLUS

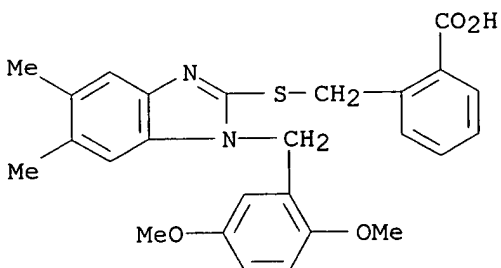
CN Benzoic acid, 2-[[[1-[(3,5-dimethoxyphenyl)methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

09/743483



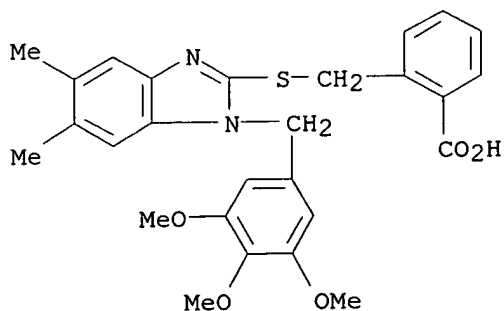
RN 255396-86-2 CAPLUS

CN Benzoic acid, 2-[[[1-[(2,5-dimethoxyphenyl)methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255396-87-3 CAPLUS

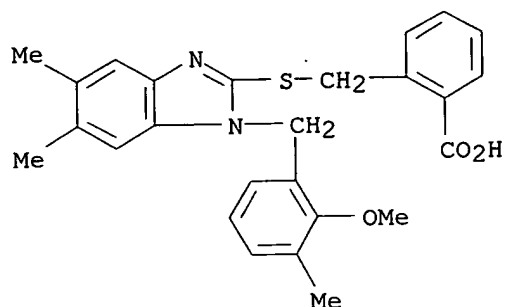
CN Benzoic acid, 2-[[[5,6-dimethyl-1-[(3,4,5-trimethoxyphenyl)methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



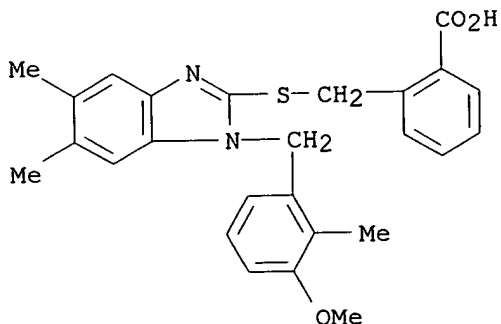
RN 255396-88-4 CAPLUS

CN Benzoic acid, 2-[[[1-[(2-methoxy-3-methylphenyl)methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

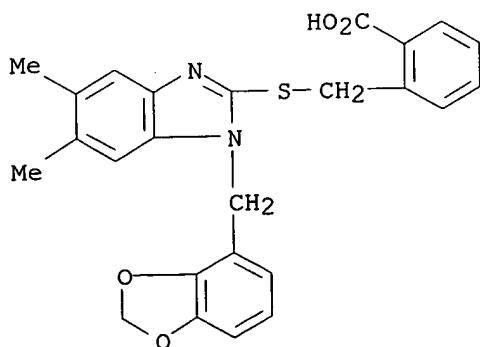
09/743483



RN 255396-89-5 CAPLUS
CN Benzoic acid, 2-[[[1-[(3-methoxy-2-methylphenyl)methyl]thio]methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



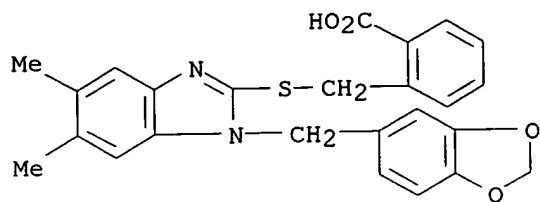
RN 255396-90-8 CAPLUS
CN Benzoic acid, 2-[[[1-(1,3-benzodioxol-4-ylmethyl)thio]methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255396-91-9 CAPLUS
CN Benzoic acid, 2-[[[1-(1,3-benzodioxol-5-ylmethyl)thio]methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

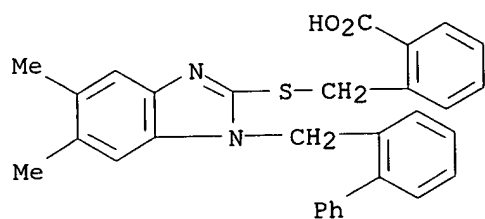
548/305.1
514/385

09/743483



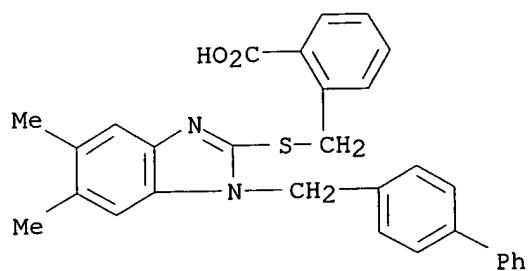
RN 255396-92-0 CAPLUS

CN Benzoic acid, 2-[[[1-([1,1'-biphenyl]-2-ylmethyl)-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



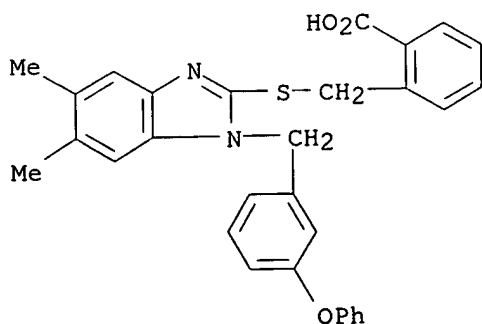
RN 255396-93-1 CAPLUS

CN Benzoic acid, 2-[[[1-([1,1'-biphenyl]-4-ylmethyl)-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

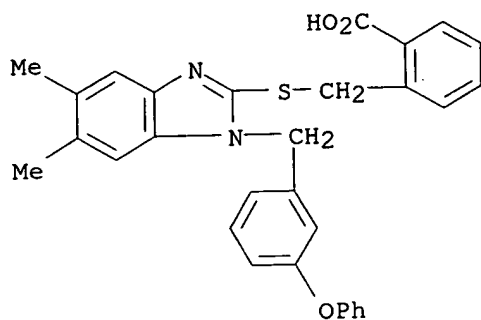


RN 255396-94-2 CAPLUS

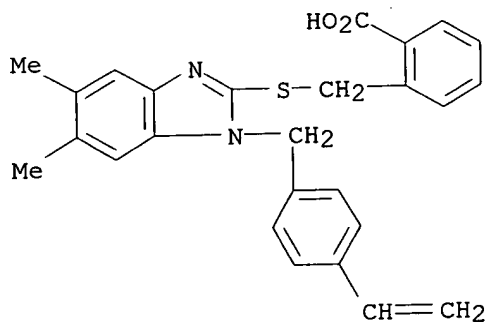
CN Benzoic acid, 2-[[[5,6-dimethyl-1-[(3-phenoxyphenyl)methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



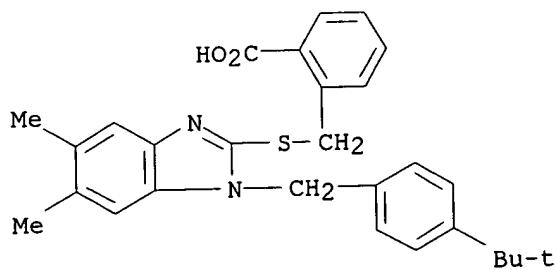
09/743483



RN 255396-95-3 CAPLUS
CN Benzoic acid, 2-[[[1-[(4-ethenylphenyl)methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

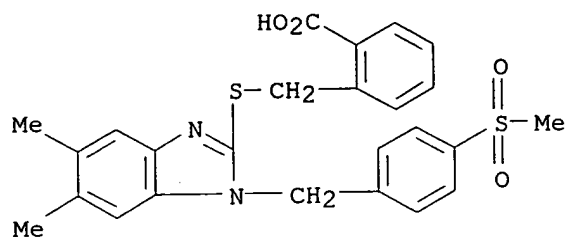


RN 255396-96-4 CAPLUS
CN Benzoic acid,
2-[[[1-[[4-(1,1-dimethylethyl)phenyl]methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255396-97-5 CAPLUS
CN Benzoic acid, 2-[[[5,6-dimethyl-1-[[4-(methylsulfonyl)phenyl]methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

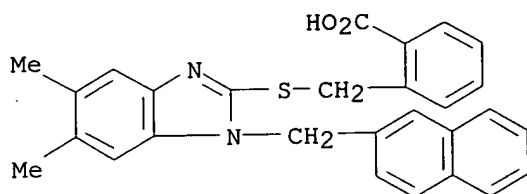
09/743483



RN 255396-98-6 CAPLUS

CN Benzoic acid,

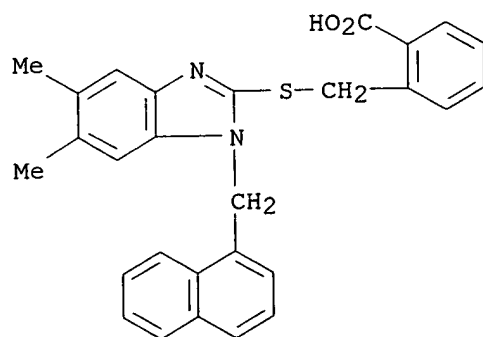
2-[[[5,6-dimethyl-1-(2-naphthalenylmethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255396-99-7 CAPLUS

CN Benzoic acid,

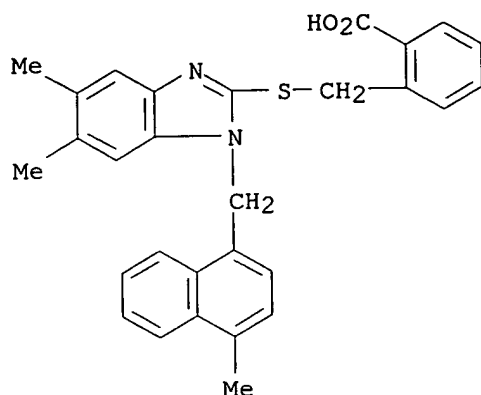
2-[[[5,6-dimethyl-1-(1-naphthalenylmethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



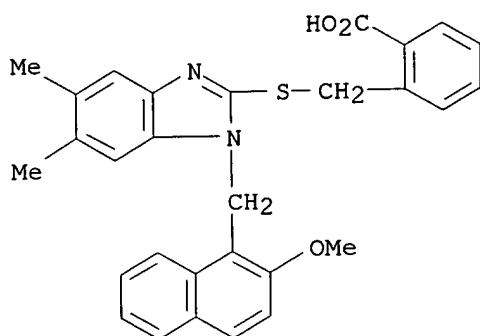
RN 255397-00-3 CAPLUS

CN Benzoic acid, 2-[[[5,6-dimethyl-1-[(4-methyl-1-naphthalenyl)methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

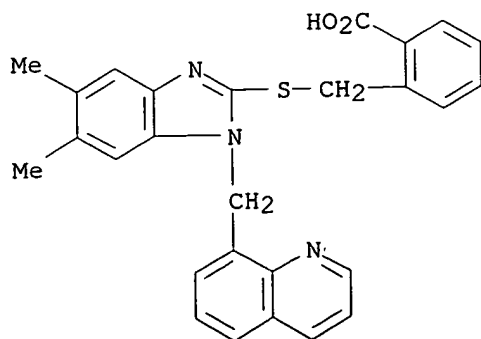
09/743483



RN 255397-01-4 CAPLUS
CN Benzoic acid, 2-[[[1-[(2-methoxy-1-naphthalenyl)methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255397-02-5 CAPLUS
CN Benzoic acid, 2-[[[5,6-dimethyl-1-(8-quinolinylmethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



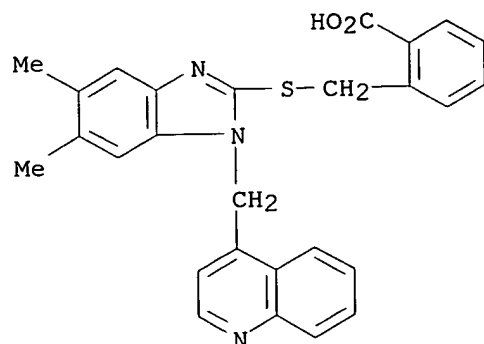
RN 255397-03-6 CAPLUS
CN Benzoic acid, 2-[[[5,6-dimethyl-1-(4-quinolinylmethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

546/314

546/172
Q-152
5

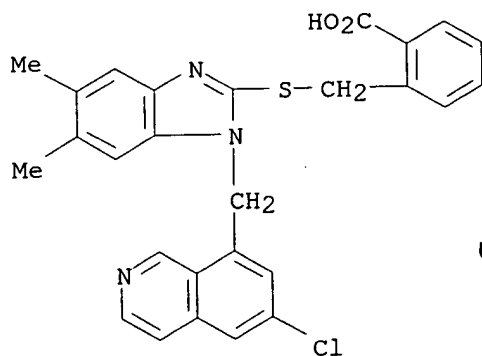
09/743483

yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255397-04-7 CAPLUS

CN Benzoic acid, 2-[[[1-[(6-chloro-8-isoquinolinyl)methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

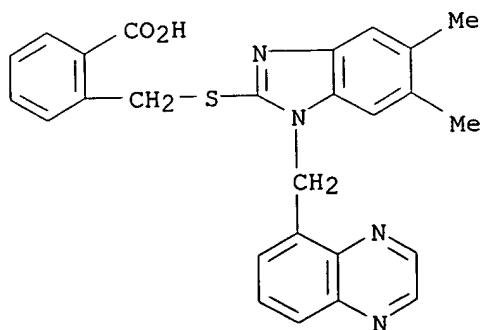


514/307

546/117

RN 255397-05-8 CAPLUS

CN Benzoic acid, 2-[[[5,6-dimethyl-1-(5-quinoxalinylnmethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



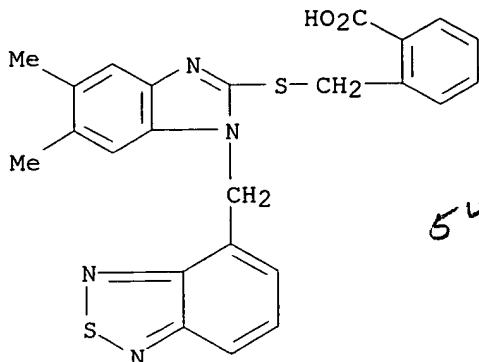
514/249

544/353

RN 255397-06-9 CAPLUS

09/743483

CN Benzoic acid, 2-[[[1-(2,1,3-benzothiadiazol-4-ylmethyl)-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

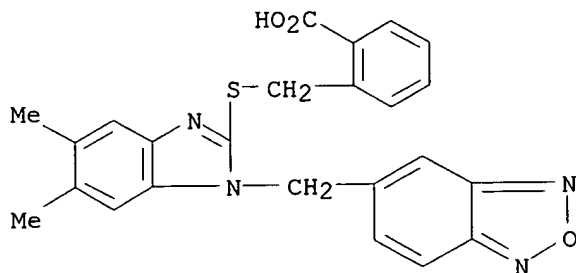


548/126

514/361

RN 255397-07-0 CAPLUS

CN Benzoic acid, 2-[[[1-(2,1,3-benzoxadiazol-5-ylmethyl)-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

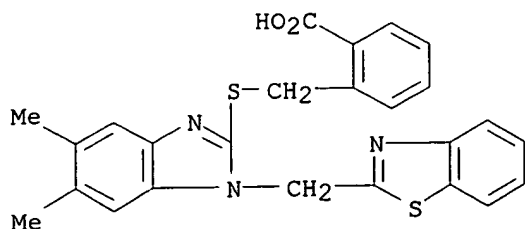


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514/364

RN 255397-08-1 CAPLUS

CN Benzoic acid, 2-[[[1-(2-benzothiazolylmethyl)-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



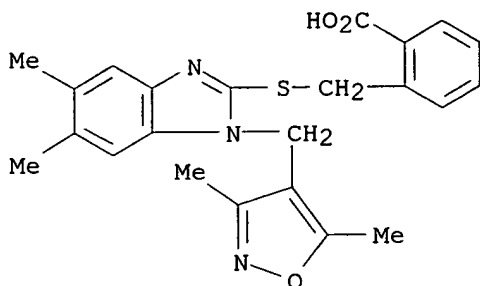
548/159

514/367

RN 255397-09-2 CAPLUS

CN Benzoic acid, 2-[[[1-[(3,5-dimethyl-4-isoxazolyl)methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

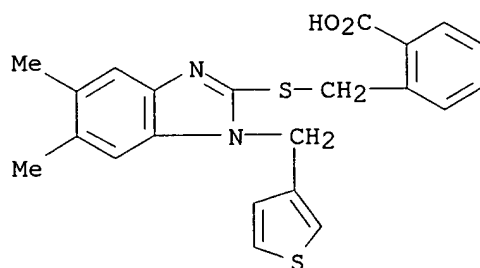
09/743483



548/247

514/378

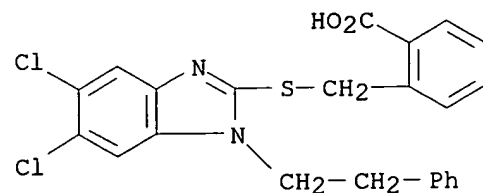
RN 255397-10-5 CAPLUS
CN Benzoic acid, 2-[[[5,6-dimethyl-1-(3-thienylmethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



548/304.7

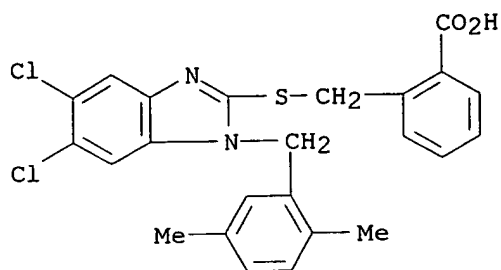
514/375

RN 255397-11-6 CAPLUS
CN Benzoic acid, 2-[[[5,6-dichloro-1-(2-phenylethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



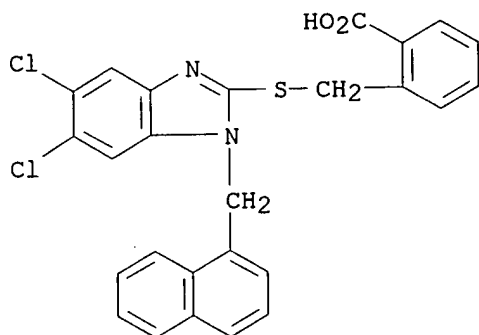
RN 255397-12-7 CAPLUS
CN Benzoic acid, 2-[[[5,6-dichloro-1-[(2,5-dimethylphenyl)methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

09/743483



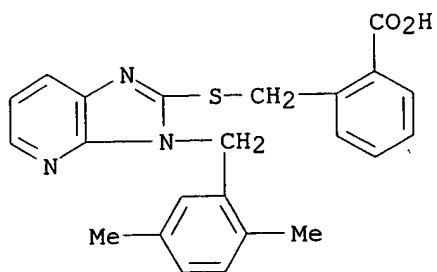
RN 255397-13-8 CAPLUS

CN Benzoic acid,
2-[[[5,6-dichloro-1-(1-naphthalenylmethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255397-14-9 CAPLUS

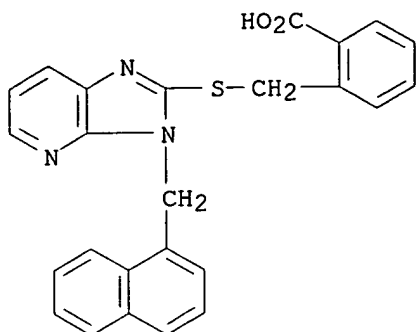
CN Benzoic acid,
2-[[[3-[(2,5-dimethylphenyl)methyl]-3H-imidazo[4,5-b]pyridin-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



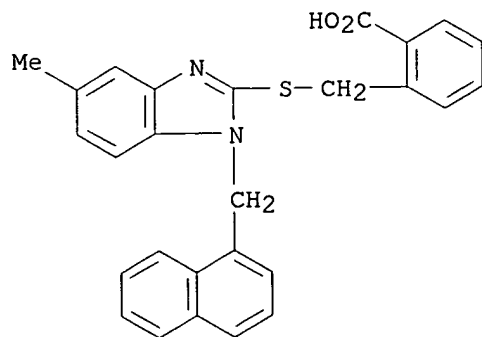
RN 255397-15-0 CAPLUS

CN Benzoic acid, 2-[[[3-(1-naphthalenylmethyl)-3H-imidazo[4,5-b]pyridin-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

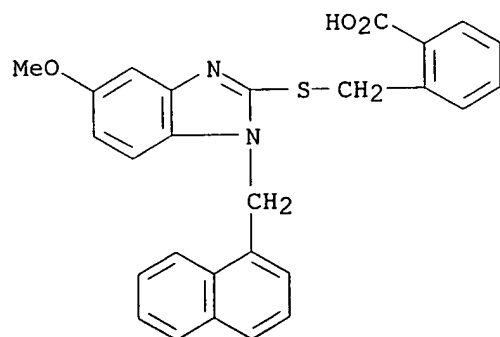
09/743483



RN 255397-16-1 CAPLUS
CN Benzoic acid, 2-[[[5-methyl-1-(1-naphthalenylmethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

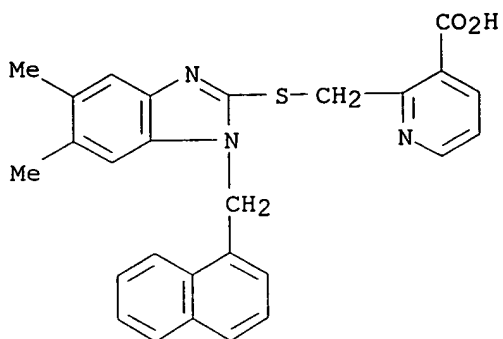


RN 255397-17-2 CAPLUS
CN Benzoic acid, 2-[[[5-methoxy-1-(1-naphthalenylmethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

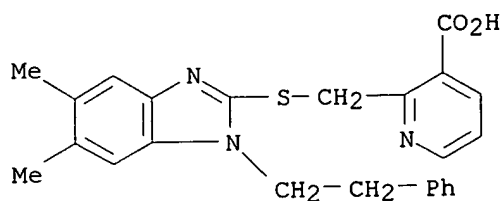


RN 255397-18-3 CAPLUS
CN 3-Pyridinecarboxylic acid, 2-[[[5,6-dimethyl-1-(1-naphthalenylmethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

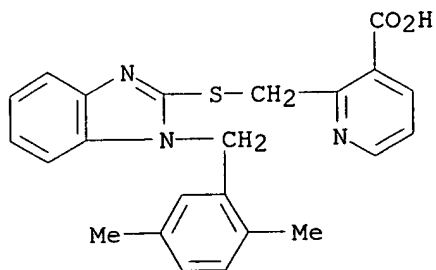
09/743483



RN 255397-19-4 CAPLUS
CN 3-Pyridinecarboxylic acid, 2-[[[5,6-dimethyl-1-(2-phenylethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

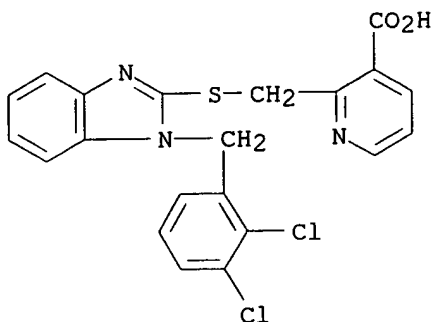


RN 255397-20-7 CAPLUS
CN 3-Pyridinecarboxylic acid, 2-[[[1-[(2,5-dimethylphenyl)methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

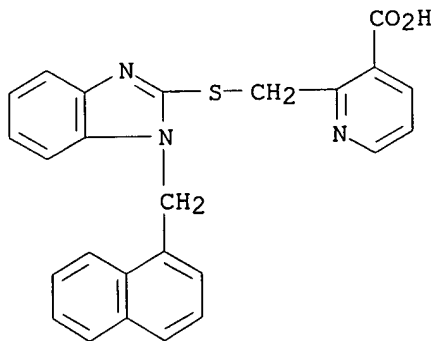


RN 255397-21-8 CAPLUS
CN 3-Pyridinecarboxylic acid, 2-[[[1-[(2,3-dichlorophenyl)methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

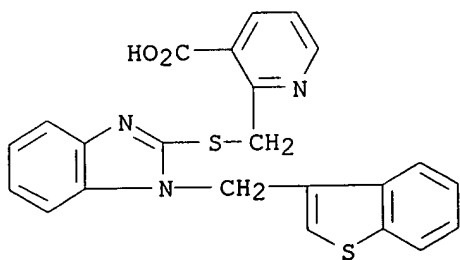
09/743483



RN 255397-22-9 CAPLUS
CN 3-Pyridinecarboxylic acid,
2-[[[1-(1-naphthalenylmethyl)-1H-benzimidazol-2-
yl]thio]methyl]- (9CI) (CA INDEX NAME)

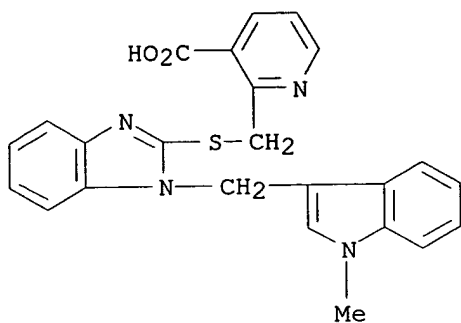


RN 255397-23-0 CAPLUS
CN 3-Pyridinecarboxylic acid, 2-[[[1-(benzo[b]thien-3-ylmethyl)-1H-
benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



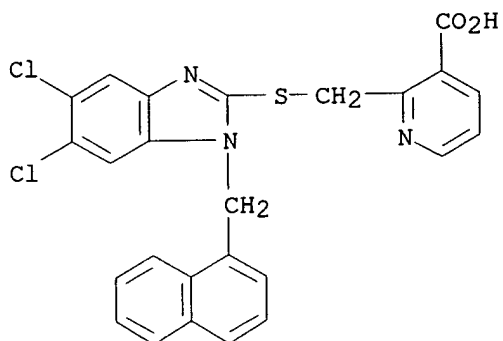
RN 255397-24-1 CAPLUS
CN 3-Pyridinecarboxylic acid, 2-[[[1-[(1-methyl-1H-indol-3-yl)methyl]-1H-
benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

09/743483



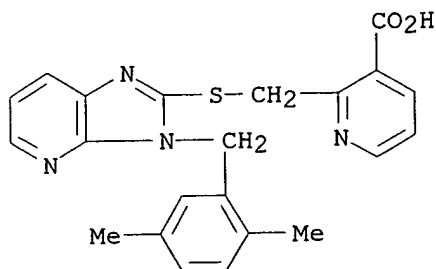
RN 255397-25-2 CAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[[5,6-dichloro-1-(1-naphthalenylmethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255397-26-3 CAPLUS

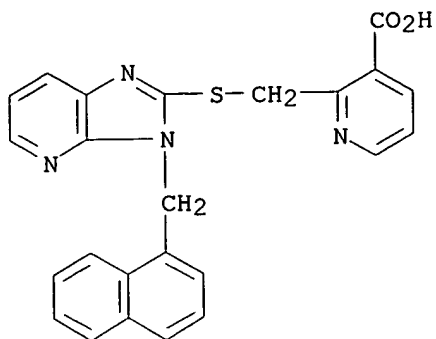
CN 3-Pyridinecarboxylic acid, 2-[[[3-[(2,5-dimethylphenyl)methyl]-3H-imidazo[4,5-b]pyridin-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



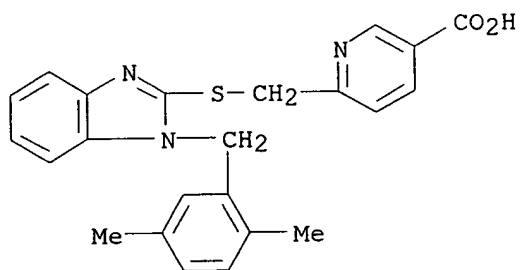
RN 255397-27-4 CAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[[3-(1-naphthalenylmethyl)-3H-imidazo[4,5-b]pyridin-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

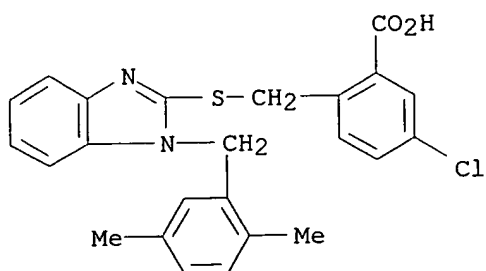
09/743483



RN 255397-28-5 CAPLUS
CN 3-Pyridinecarboxylic acid, 6-[[[1-[(2,5-dimethylphenyl)methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

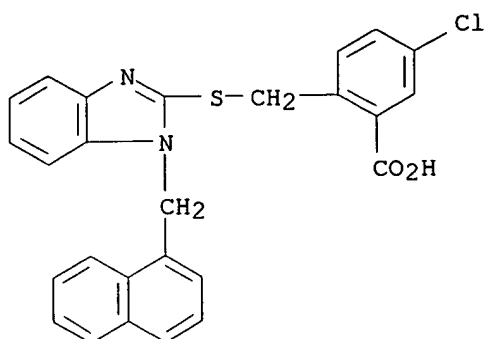


RN 255397-29-6 CAPLUS
CN Benzoic acid,
5-chloro-2-[[[1-[(2,5-dimethylphenyl)methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

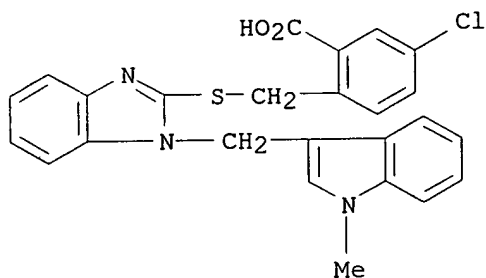


RN 255397-30-9 CAPLUS
CN Benzoic acid, 5-chloro-2-[[[1-(1-naphthalenylmethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

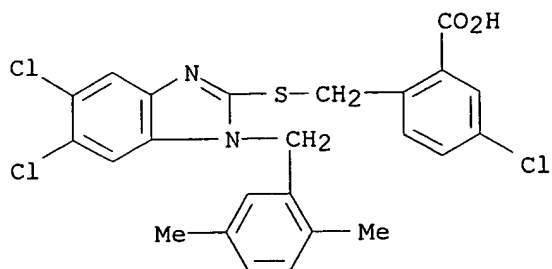
09/743483



RN 255397-31-0 CAPLUS
CN Benzoic acid, 5-chloro-2-[[[1-[(1-methyl-1H-indol-3-yl)methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

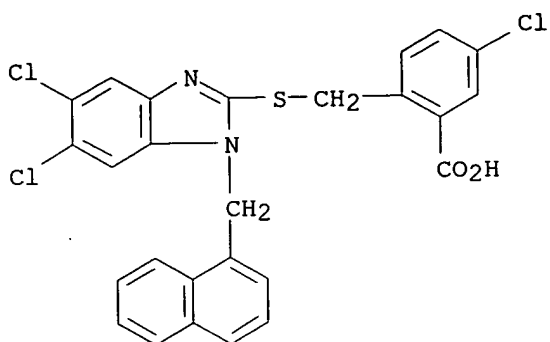


RN 255397-32-1 CAPLUS
CN Benzoic acid,
5-chloro-2-[[[5,6-dichloro-1-[(2,5-dimethylphenyl)methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255397-33-2 CAPLUS
CN Benzoic acid, 5-chloro-2-[[[5,6-dichloro-1-(1-naphthalenylmethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

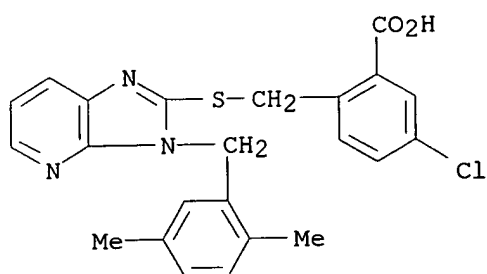
09/743483



RN 255397-34-3 CAPLUS

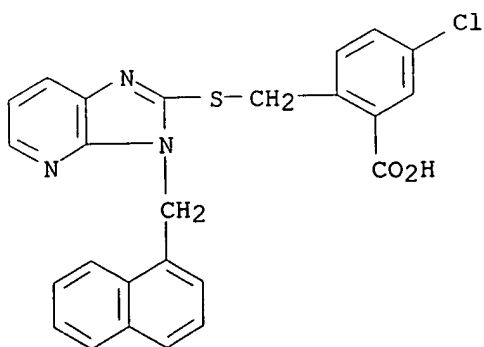
CN Benzoic acid,

5-chloro-2-[[[3-[(2,5-dimethylphenyl)methyl]-3H-imidazo[4,5-b]pyridin-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255397-35-4 CAPLUS

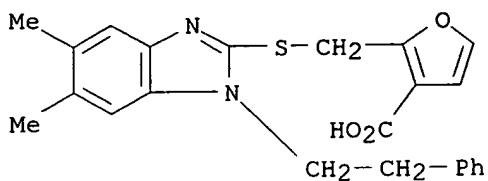
CN Benzoic acid, 5-chloro-2-[[[3-(1-naphthalenylmethyl)-3H-imidazo[4,5-b]pyridin-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255397-36-5 CAPLUS

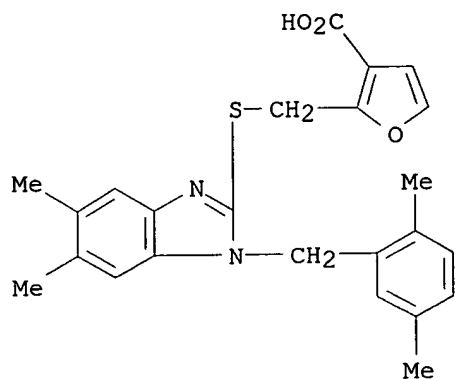
CN 3-Furancarboxylic acid, 2-[[[5,6-dimethyl-1-(2-phenylethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

09/743483



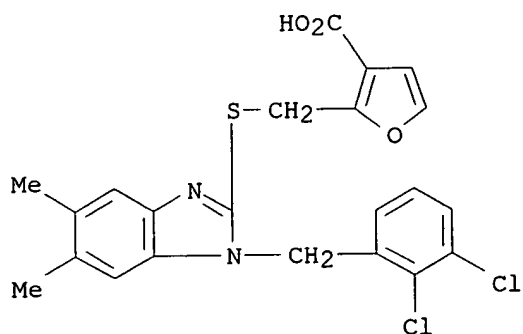
RN 255397-37-6 CAPLUS

CN 3-Furancarboxylic acid, 2-[[[1-[(2,5-dimethylphenyl)methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255397-38-7 CAPLUS

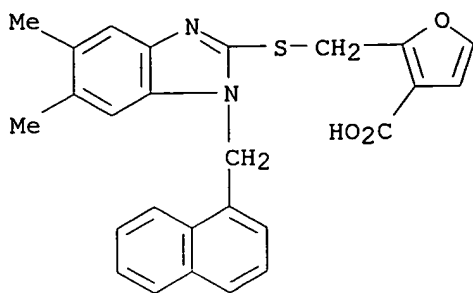
CN 3-Furancarboxylic acid, 2-[[[1-[(2,3-dichlorophenyl)methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255397-39-8 CAPLUS

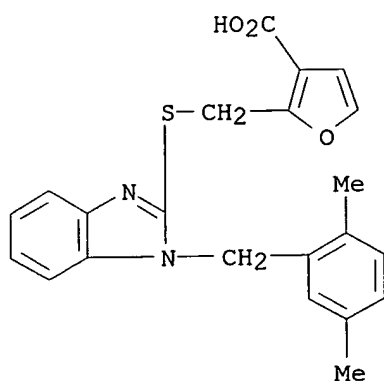
CN 3-Furancarboxylic acid, 2-[[[5,6-dimethyl-1-(1-naphthalenylmethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

09/743483



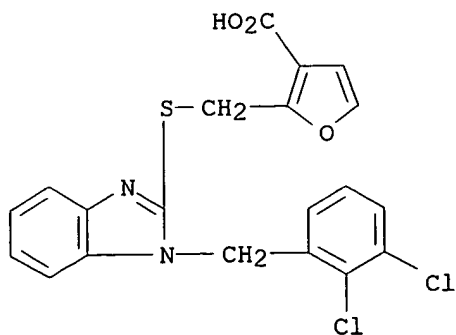
RN 255397-40-1 CAPLUS

CN 3-Furancarboxylic acid, 2-[[[1-[(2,5-dimethylphenyl)methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255397-41-2 CAPLUS

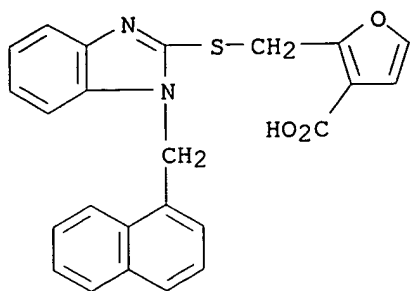
CN 3-Furancarboxylic acid, 2-[[[1-[(2,3-dichlorophenyl)methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255397-42-3 CAPLUS

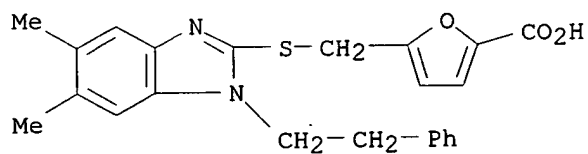
CN 3-Furancarboxylic acid, 2-[[[1-[(1-naphthalenyl)methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

09/743483



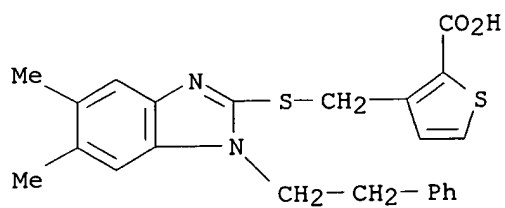
RN 255397-43-4 CAPLUS

CN 2-Furancarboxylic acid, 5-[[[5,6-dimethyl-1-(2-phenylethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



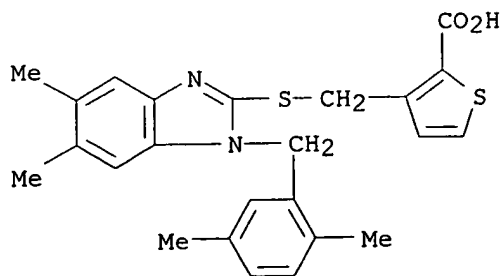
RN 255397-44-5 CAPLUS

CN 2-Thiophenecarboxylic acid, 3-[[[5,6-dimethyl-1-(2-phenylethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255397-45-6 CAPLUS

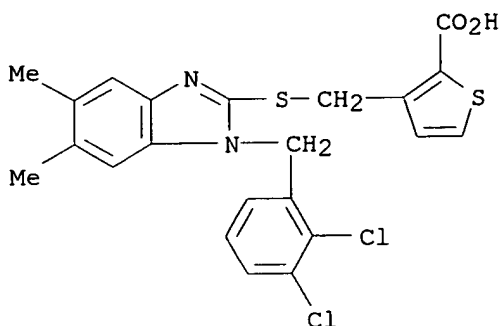
CN 2-Thiophenecarboxylic acid, 3-[[[1-[(2,5-dimethylphenyl)methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255397-46-7 CAPLUS

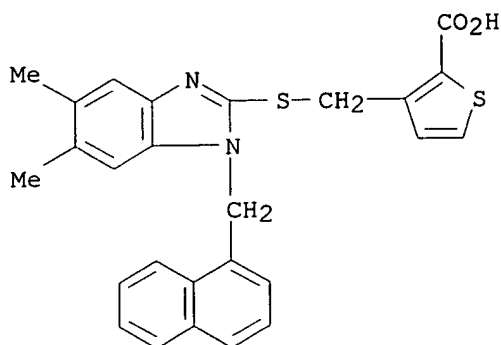
09/743483

CN 2-Thiophenecarboxylic acid, 3-[[[1-[(2,3-dichlorophenyl)methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



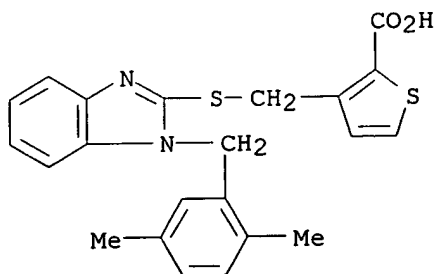
RN 255397-47-8 CAPLUS

CN 2-Thiophenecarboxylic acid, 3-[[[5,6-dimethyl-1-(1-naphthalenylmethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255397-48-9 CAPLUS

CN 2-Thiophenecarboxylic acid, 3-[[[1-[(2,5-dimethylphenyl)methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

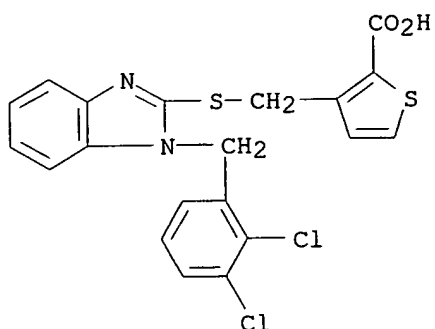


RN 255397-49-0 CAPLUS

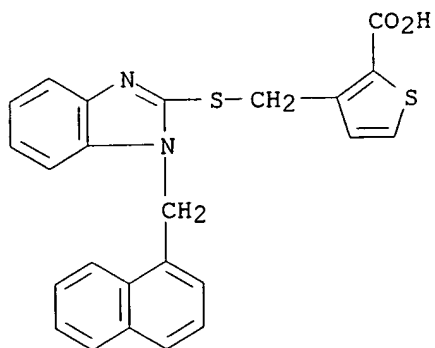
CN 2-Thiophenecarboxylic acid, 3-[[[1-[(2,3-dichlorophenyl)methyl]-1H-

09/743483

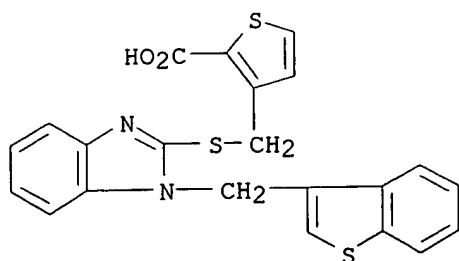
benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255397-50-3 CAPLUS
CN 2-Thiophenecarboxylic acid,
3-[[[1-(1-naphthalenylmethyl)-1H-benzimidazol-
2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

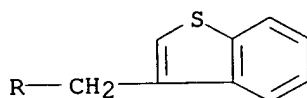
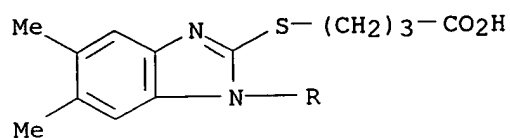


RN 255397-51-4 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[1-(benzo[b]thien-3-ylmethyl)-1H-
benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

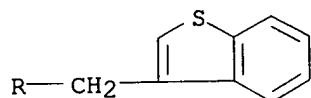
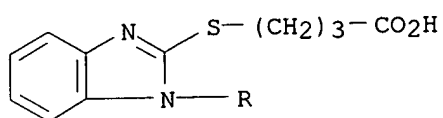


RN 255397-53-6 CAPLUS
CN Butanoic acid, 4-[[[1-(benzo[b]thien-3-ylmethyl)-5,6-dimethyl-1H-
benzimidazol-2-yl]thio]- (9CI) (CA INDEX NAME)

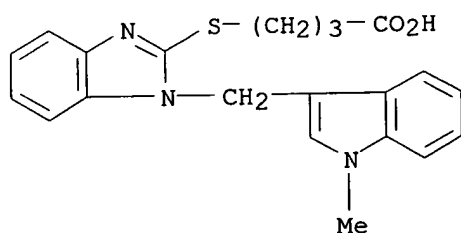
09/743483



RN 255397-54-7 CAPLUS
CN Butanoic acid,
4-[[1-(benzo[b]thien-3-ylmethyl)-1H-benzimidazol-2-yl]thio]-
(9CI) (CA INDEX NAME)

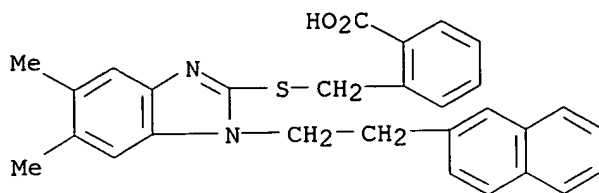


RN 255397-55-8 CAPLUS
CN Butanoic acid, 4-[[1-[(1-methyl-1H-indol-3-yl)methyl]-1H-benzimidazol-2-yl]thio]- (9CI) (CA INDEX NAME)



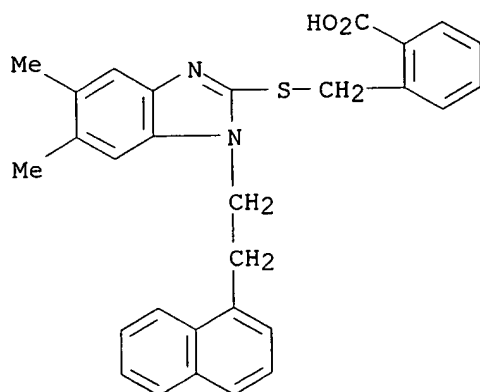
RN 255397-56-9 CAPLUS
CN Benzoic acid, 2-[[[5,6-dimethyl-1-[2-(2-naphthalenyl)ethyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

09/743483



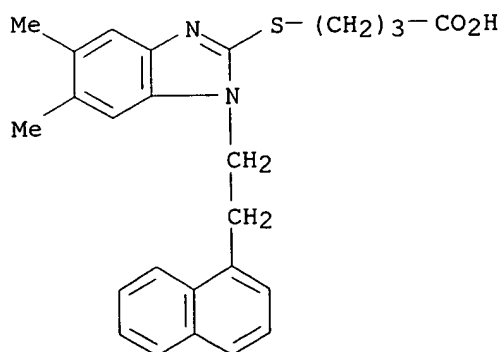
RN 255397-57-0 CAPLUS

CN Benzoic acid, 2-[[[5,6-dimethyl-1-[2-(1-naphthalenyl)ethyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255397-58-1 CAPLUS

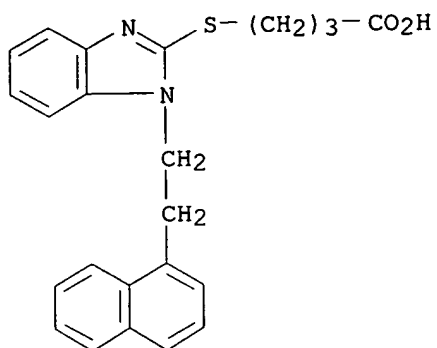
CN Butanoic acid, 4-[[[5,6-dimethyl-1-[2-(1-naphthalenyl)ethyl]-1H-benzimidazol-2-yl]thio]- (9CI) (CA INDEX NAME)



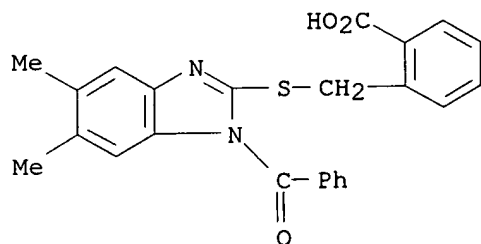
RN 255397-59-2 CAPLUS

CN Butanoic acid, 4-[[[1-[2-(1-naphthalenyl)ethyl]-1H-benzimidazol-2-yl]thio]- (9CI) (CA INDEX NAME)

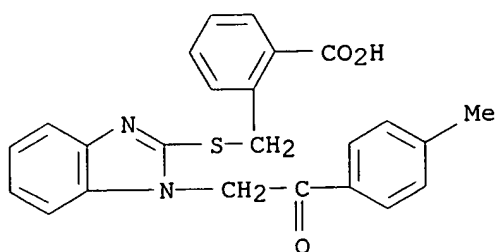
09/743483



RN 255397-60-5 CAPLUS
CN Benzoic acid, 2-[[[1-benzoyl-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

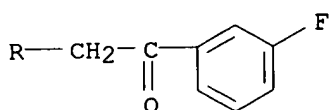
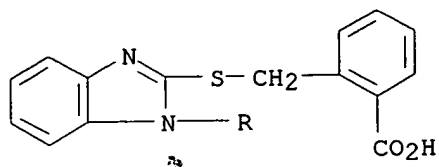


RN 255397-62-7 CAPLUS
CN Benzoic acid, 2-[[[1-[2-(4-methylphenyl)-2-oxoethyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

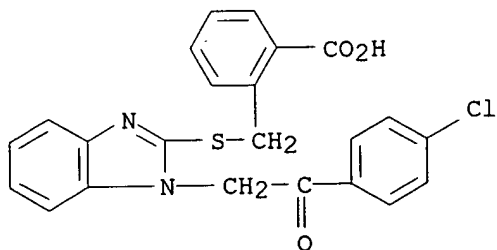


RN 255397-63-8 CAPLUS
CN Benzoic acid, 2-[[[1-[2-(3-fluorophenyl)-2-oxoethyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

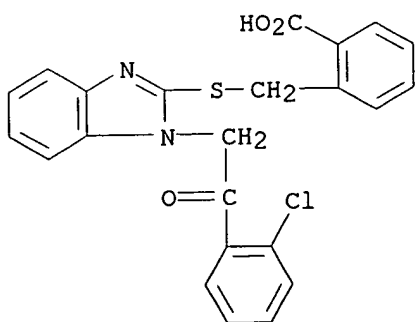
09/743483



RN 255397-64-9 CAPLUS
CN Benzoic acid, 2-[[[1-[2-(4-chlorophenyl)-2-oxoethyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

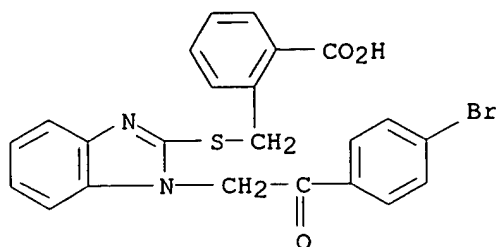


RN 255397-65-0 CAPLUS
CN Benzoic acid, 2-[[[1-[2-(2-chlorophenyl)-2-oxoethyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

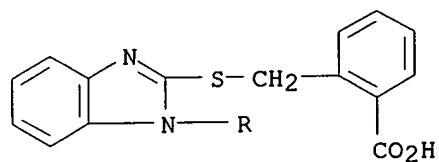


RN 255397-66-1 CAPLUS
CN Benzoic acid, 2-[[[1-[2-(4-bromophenyl)-2-oxoethyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

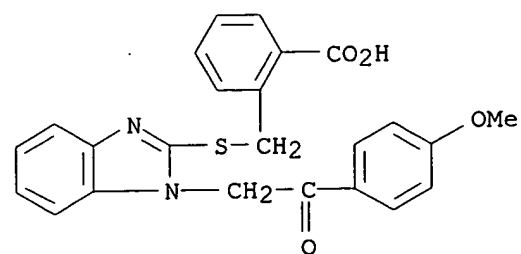
09/743483



RN 255397-67-2 CAPLUS
CN Benzoic acid, 2-[[[1-[2-(3-bromophenyl)-2-oxoethyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

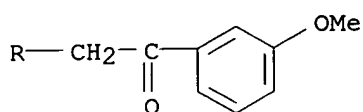
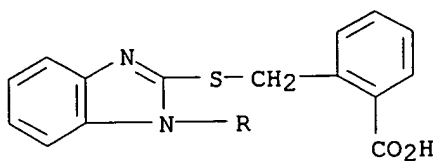


RN 255397-68-3 CAPLUS
CN Benzoic acid, 2-[[[1-[2-(4-methoxyphenyl)-2-oxoethyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

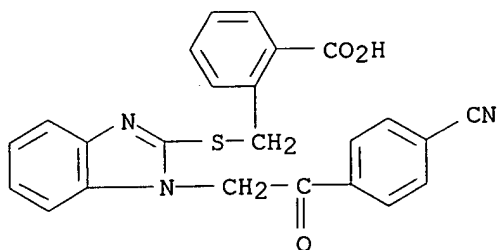


RN 255397-69-4 CAPLUS
CN Benzoic acid, 2-[[[1-[2-(3-methoxyphenyl)-2-oxoethyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

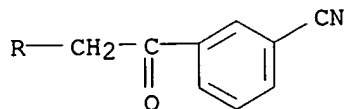
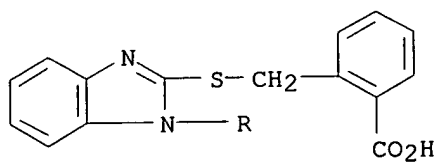
09/743483



RN 255397-70-7 CAPLUS
CN Benzoic acid, 2-[[[1-[2-(4-cyanophenyl)-2-oxoethyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

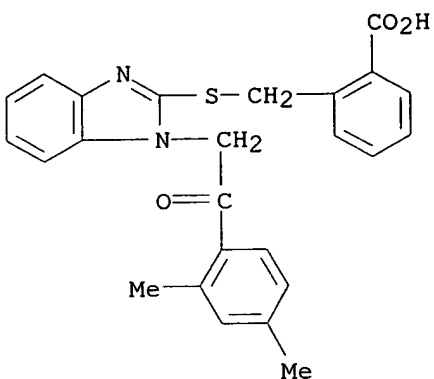


RN 255397-71-8 CAPLUS
CN Benzoic acid, 2-[[[1-[2-(3-cyanophenyl)-2-oxoethyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



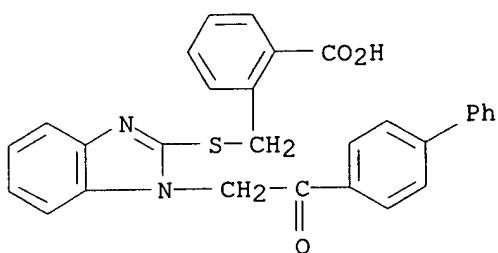
RN 255397-72-9 CAPLUS
CN Benzoic acid,
2-[[[1-[2-(2,4-dimethylphenyl)-2-oxoethyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

09/743483



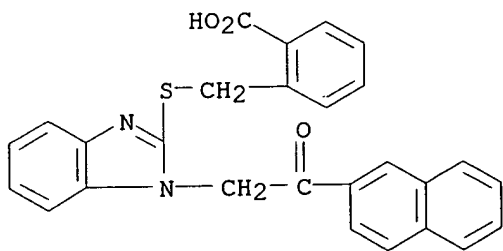
RN 255397-73-0 CAPLUS

CN Benzoic acid,
2-[[[1-(2-[1,1'-biphenyl]-4-yl-2-oxoethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



RN 255397-74-1 CAPLUS

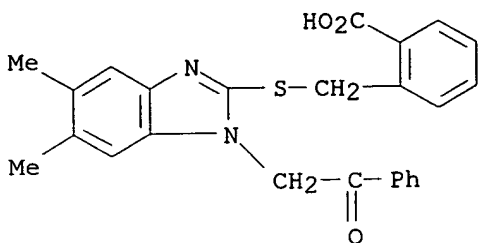
CN Benzoic acid, 2-[[[1-[2-(2-naphthalenyl)-2-oxoethyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



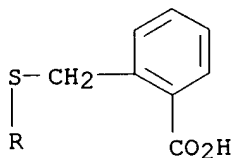
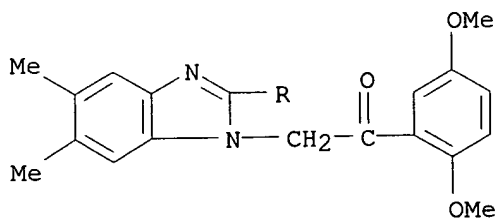
RN 255397-75-2 CAPLUS

CN Benzoic acid,
2-[[[5,6-dimethyl-1-(2-oxo-2-phenylethyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

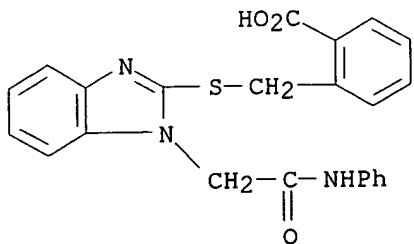
09/743483



RN 255397-76-3 CAPLUS
 CN Benzoic acid, 2-[[[1-[2-(2,5-dimethoxyphenyl)-2-oxoethyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

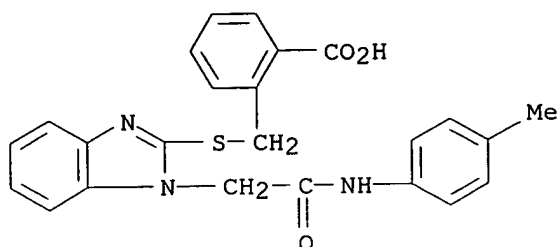


RN 255397-77-4 CAPLUS
 CN Benzoic acid, 2-[[[1-[2-oxo-2-(phenylamino)ethyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



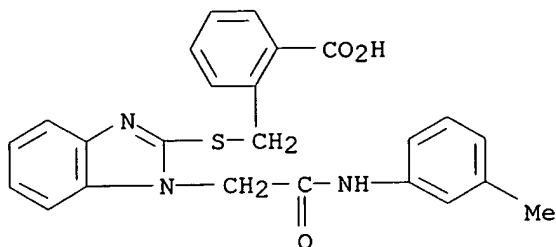
RN 255397-78-5 CAPLUS
 CN Benzoic acid, 2-[[[1-[2-[(4-methylphenyl)amino]-2-oxoethyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

09/743483



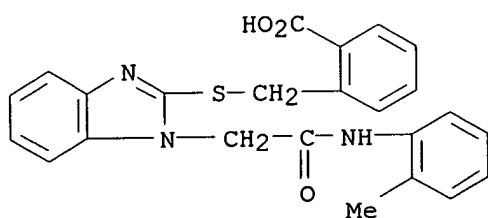
RN 255397-79-6 CAPLUS

CN Benzoic acid, 2-[[[1-[2-[(3-methylphenyl)amino]-2-oxoethyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



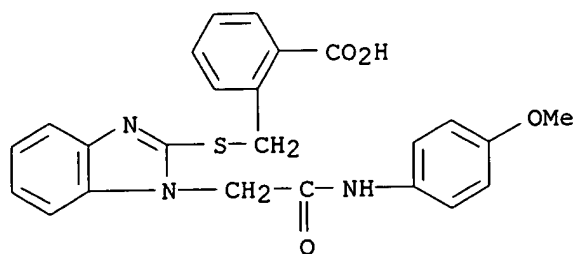
RN 255397-80-9 CAPLUS

CN Benzoic acid, 2-[[[1-[2-[(2-methylphenyl)amino]-2-oxoethyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

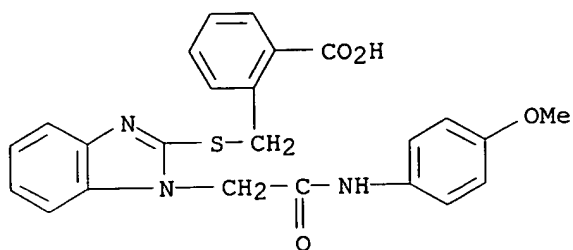


RN 255397-81-0 CAPLUS

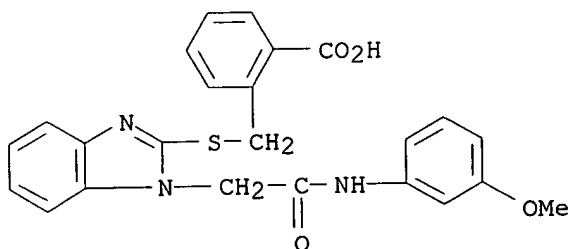
CN Benzoic acid, 2-[[[1-[2-[(4-methoxyphenyl)amino]-2-oxoethyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)



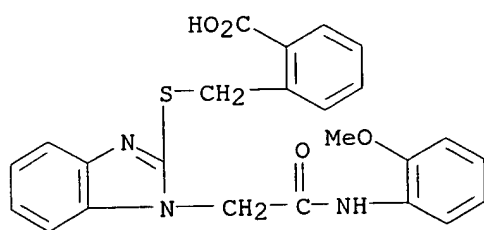
09/743483



RN 255397-82-1 CAPLUS
CN Benzoic acid, 2-[[[1-[2-[(3-methoxyphenyl)amino]-2-oxoethyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

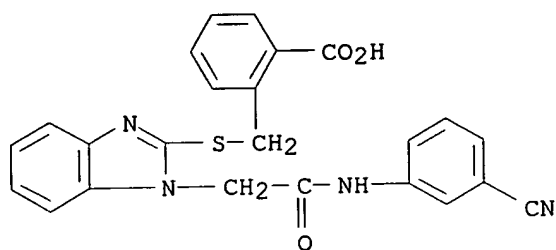


RN 255397-83-2 CAPLUS
CN Benzoic acid, 2-[[[1-[2-[(2-methoxyphenyl)amino]-2-oxoethyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

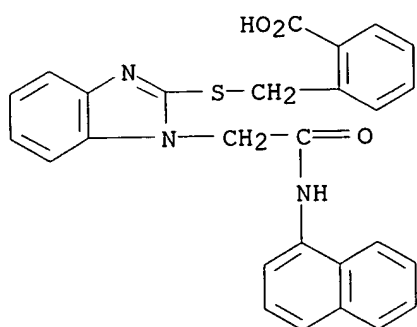


RN 255397-84-3 CAPLUS
CN Benzoic acid,
2-[[[1-[2-[(3-cyanophenyl)amino]-2-oxoethyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

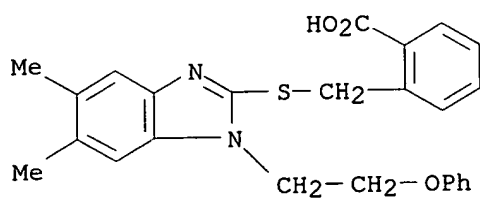
09/743483



RN 255397-85-4 CAPLUS
 CN Benzoic acid,
 2-[[[1-[2-(1-naphthalenylamino)-2-oxoethyl]-1H-benzimidazol-
 2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

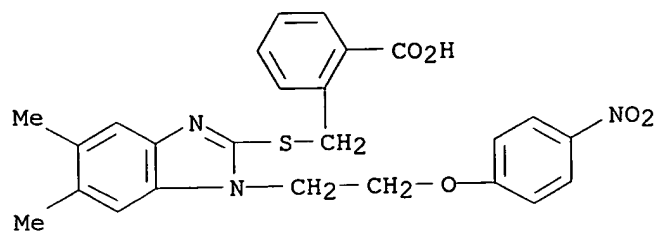


RN 255397-86-5 CAPLUS
 CN Benzoic acid, 2-[[[5,6-dimethyl-1-(2-phenoxyethyl)-1H-benzimidazol-2-
 yl]thio]methyl]- (9CI) (CA INDEX NAME)

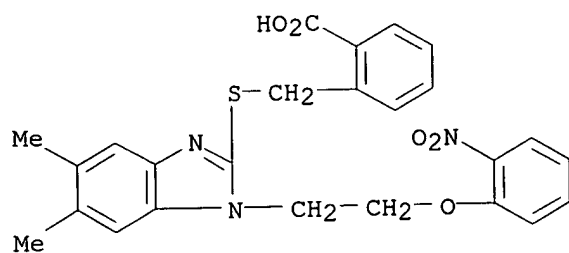


RN 255397-87-6 CAPLUS
 CN Benzoic acid, 2-[[[5,6-dimethyl-1-[2-(4-nitrophenoxy)ethyl]-1H-
 benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

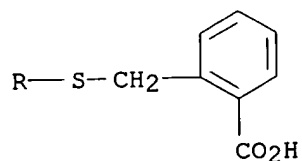
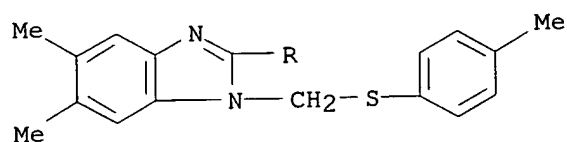
09/743483



RN 255397-88-7 CAPLUS
CN Benzoic acid, 2-[[[5,6-dimethyl-1-[2-(2-nitrophenoxy)ethyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

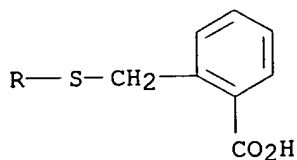
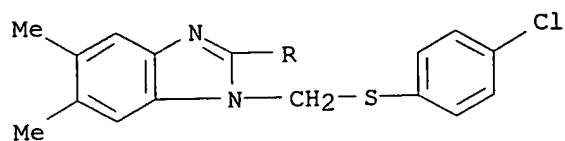


RN 255397-89-8 CAPLUS
CN Benzoic acid, 2-[[[5,6-dimethyl-1-[(4-methylphenyl)thio]methyl]-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

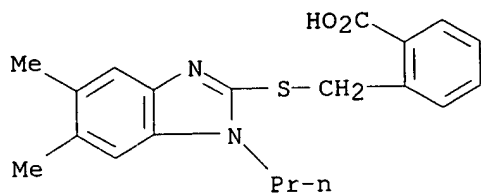


RN 255397-90-1 CAPLUS
CN Benzoic acid, 2-[[[1-[(4-chlorophenyl)thio]methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

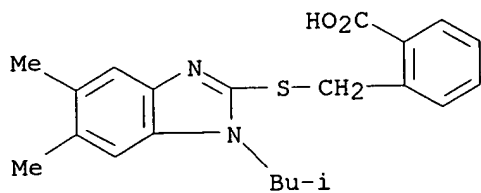
09/743483



RN 255397-91-2 CAPLUS
CN Benzoic acid,
2-[[(5,6-dimethyl-1-propyl-1H-benzimidazol-2-yl)thio]methyl]-
(9CI) (CA INDEX NAME)

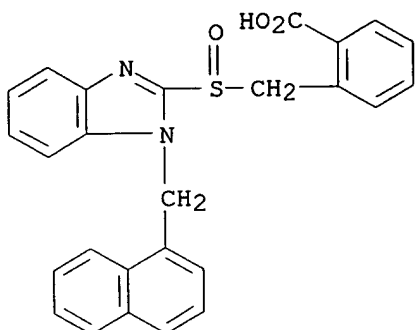


RN 255397-92-3 CAPLUS
CN Benzoic acid, 2-[[[5,6-dimethyl-1-(2-methylpropyl)-1H-benzimidazol-2-yl]thio]methyl]- (9CI) (CA INDEX NAME)

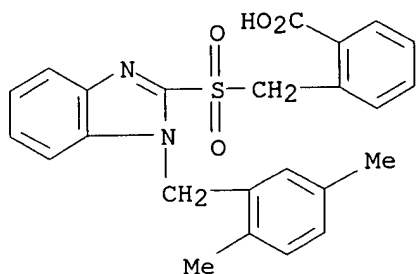


RN 255397-94-5 CAPLUS
CN Benzoic acid, 2-[[[1-(1-naphthalenylmethyl)-1H-benzimidazol-2-yl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

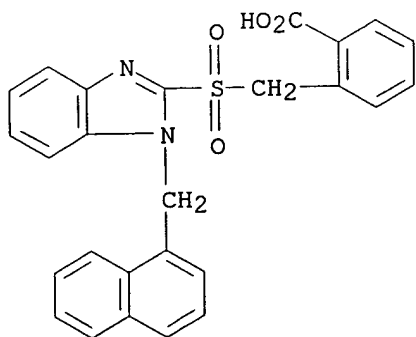
09/743483



RN 255397-95-6 CAPLUS
CN Benzoic acid, 2-[[[1-(2,5-dimethylphenyl)methyl]-1H-benzimidazol-2-yl]sulfonyl]methyl]- (9CI) (CA INDEX NAME)

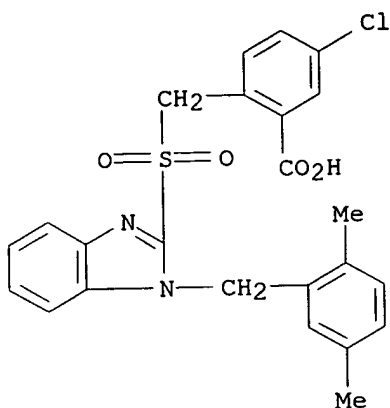


RN 255397-96-7 CAPLUS
CN Benzoic acid, 2-[[[1-(1-naphthalenylmethyl)-1H-benzimidazol-2-yl]sulfonyl]methyl]- (9CI) (CA INDEX NAME)



RN 255397-97-8 CAPLUS
CN Benzoic acid,
5-chloro-2-[[[1-(2,5-dimethylphenyl)methyl]-1H-benzimidazol-2-yl]sulfonyl]methyl]- (9CI) (CA INDEX NAME)

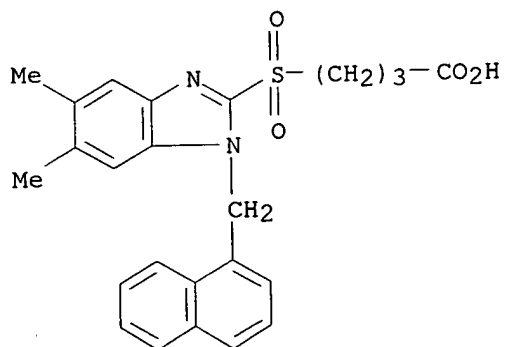
09/743483



RN 255397-98-9 CAPLUS

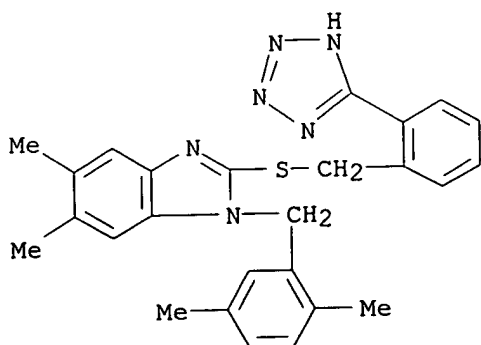
CN Butanoic acid,

4-[[5,6-dimethyl-1-(1-naphthalenylmethyl)-1H-benzimidazol-2-yl]sulfonyl]- (9CI) (CA INDEX NAME)



RN 255397-99-0 CAPLUS

CN 1H-Benzimidazole, 1-[(2,5-dimethylphenyl)methyl]-5,6-dimethyl-2-[[[2-(1H-tetrazol-5-yl)phenyl]methyl]thio]- (9CI) (CA INDEX NAME)

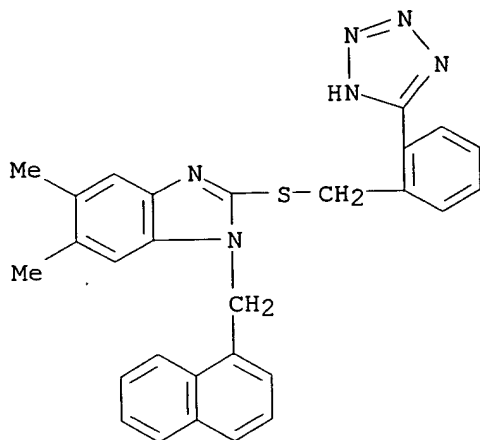


RN 255398-00-6 CAPLUS

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548/381

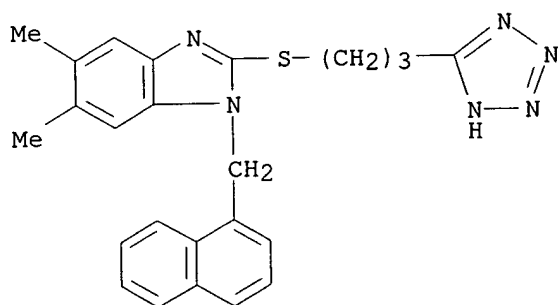
09/743483

CN 1H-Benzimidazole, 5,6-dimethyl-1-(1-naphthalenylmethyl)-2-[[[2-(1H-tetrazol-5-yl)phenyl]methyl]thio]- (9CI) (CA INDEX NAME)



RN 255398-02-8 CAPLUS

CN 1H-Benzimidazole,
5,6-dimethyl-1-(1-naphthalenylmethyl)-2-[[3-(1H-tetrazol-
5-yl)propyl]thio]- (9CI) (CA INDEX NAME)



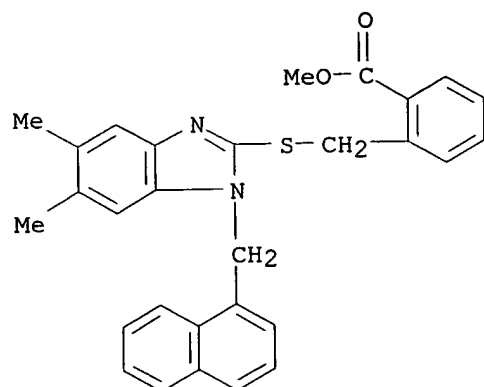
IT 255398-16-4P 255398-18-6P 255398-23-3P
255398-27-7P 255398-31-3P 255398-32-4P
255398-33-5P 255398-34-6P 255398-35-7P
255398-36-8P 255398-37-9P 255398-38-0P
255398-39-1P 255398-40-4P 255398-41-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of thiobenzimidazole derivs. as chymase inhibitors)

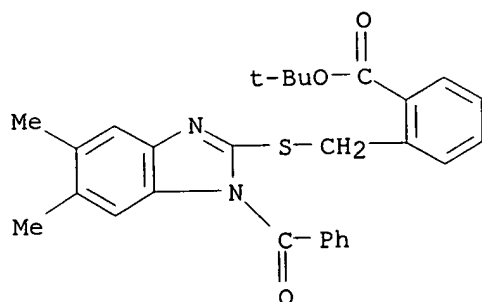
RN 255398-16-4 CAPLUS

CN Benzoic acid,
2-[[[5,6-dimethyl-1-(1-naphthalenylmethyl)-1H-benzimidazol-2-
yl]thio]methyl]-, methyl ester (9CI) (CA INDEX NAME)

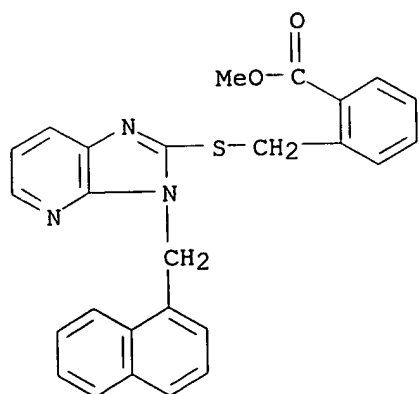
09/743483



RN 255398-18-6 CAPLUS
CN Benzoic acid, 2-[[[1-benzoyl-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 255398-23-3 CAPLUS
CN Benzoic acid, 2-[[[3-(1-naphthalenylmethyl)-3H-imidazo[4,5-b]pyridin-2-yl]thio]methyl]-, methyl ester (9CI) (CA INDEX NAME)



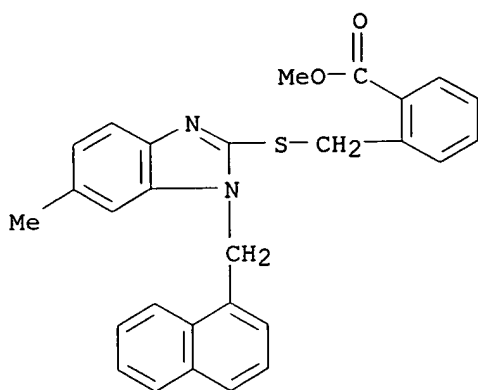
RN 255398-27-7 CAPLUS

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546/11

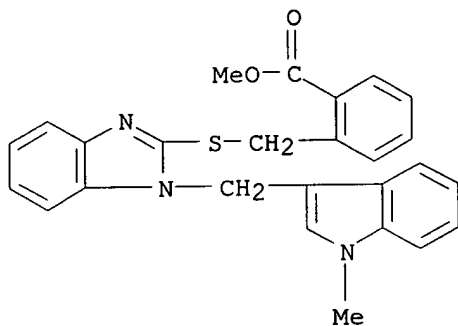
09/743483

CN Benzoic acid, 2-[[[6-methyl-1-(1-naphthalenylmethyl)-1H-benzimidazol-2-yl]thio]methyl]-, methyl ester (9CI) (CA INDEX NAME)



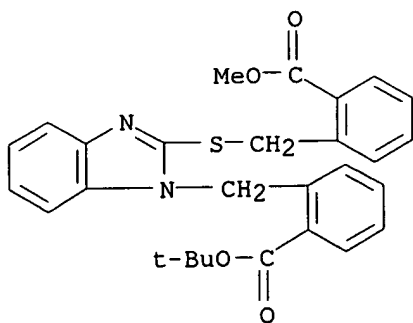
RN 255398-31-3 CAPLUS

CN Benzoic acid, 2-[[[1-[(1-methyl-1H-indol-3-yl)methyl]-1H-benzimidazol-2-yl]thio]methyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 255398-32-4 CAPLUS

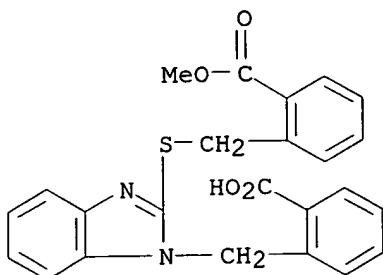
CN Benzoic acid, 2-[[[1-[[2-[(1,1-dimethylethoxy)carbonyl]phenyl]methyl]-1H-benzimidazol-2-yl]thio]methyl]-, methyl ester (9CI) (CA INDEX NAME)



09/743483

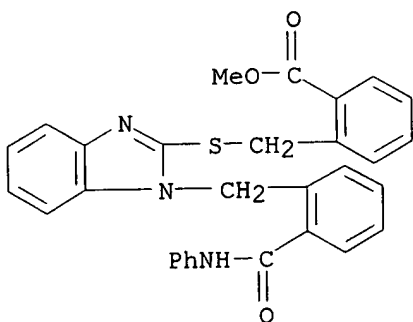
RN 255398-33-5 CAPLUS

CN Benzoic acid, 2-[[[1-[(2-carboxyphenyl)methyl]-1H-benzimidazol-2-yl]thio]methyl]-, 1-methyl ester (9CI) (CA INDEX NAME)



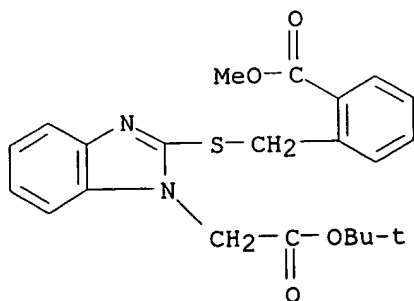
RN 255398-34-6 CAPLUS

CN Benzoic acid, 2-[[[1-[[2-[(phenylamino)carbonyl]phenyl]methyl]-1H-benzimidazol-2-yl]thio]methyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 255398-35-7 CAPLUS

CN 1H-Benzimidazole-1-acetic acid,
2-[[[2-(methoxycarbonyl)phenyl]methyl]thio]
1-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

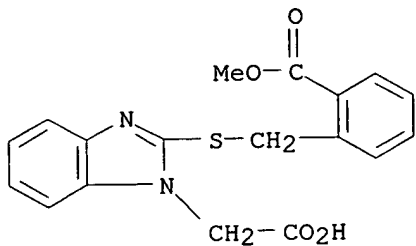


RN 255398-36-8 CAPLUS

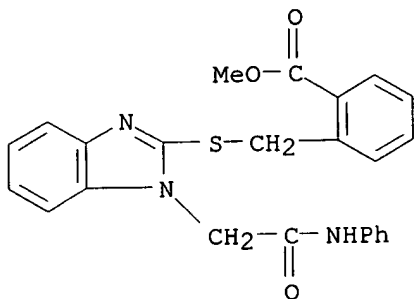
CN 1H-Benzimidazole-1-acetic acid,
2-[[[2-(methoxycarbonyl)phenyl]methyl]thio]

09/743483

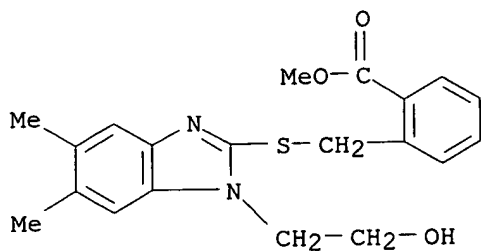
] - (9CI) (CA INDEX NAME)



RN 255398-37-9 CAPLUS
CN Benzoic acid, 2-[[[1-[2-oxo-2-(phenylamino)ethyl]-1H-benzimidazol-2-yl]thio]methyl]-, methyl ester (9CI) (CA INDEX NAME)

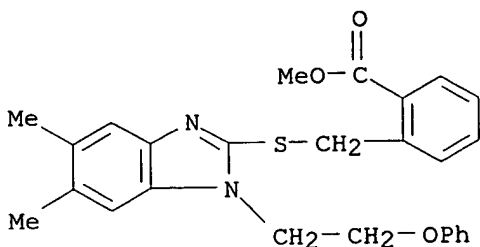


RN 255398-38-0 CAPLUS
CN Benzoic acid, 2-[[[1-(2-hydroxyethyl)-5,6-dimethyl-1H-benzimidazol-2-yl]thio]methyl]-, methyl ester (9CI) (CA INDEX NAME)

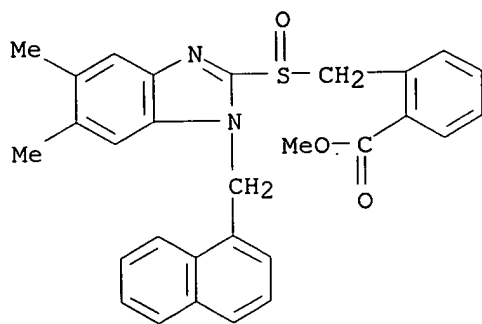


RN 255398-39-1 CAPLUS
CN Benzoic acid, 2-[[[5,6-dimethyl-1-(2-phenoxyethyl)-1H-benzimidazol-2-yl]thio]methyl]-, methyl ester (9CI) (CA INDEX NAME)

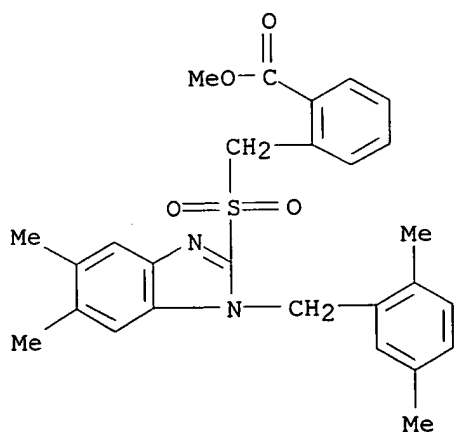
09/743483



RN 255398-40-4 CAPLUS
CN Benzoic acid, 2-[[[5,6-dimethyl-1-(1-naphthalenylmethyl)-1H-benzimidazol-2-yl]sulfinyl]methyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 255398-41-5 CAPLUS
CN Benzoic acid, 2-[[[1-[(2,5-dimethylphenyl)methyl]-5,6-dimethyl-1H-benzimidazol-2-yl]sulfonyl]methyl]-, methyl ester (9CI) (CA INDEX NAME)

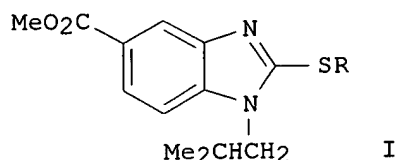


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RE
(1) Anon; CAPLUS
(3) Laboratories Upsa; CA 2035710 A CAPLUS

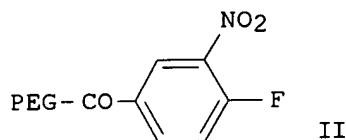
09/743483

(4) Laboratories Upsa; FR 2658511 A CAPLUS
(5) Laboratories Upsa; FR 2658511 A CAPLUS
(6) Laboratories Upsa; EP 442820 A CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

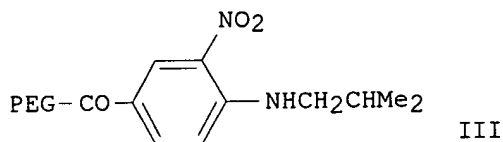
L4 ANSWER 3 OF 21 CAPLUS COPYRIGHT 2001 ACS
AN 1999:621519 CAPLUS
DN 131:286455
TI Liquid-phase synthesis of 2-(alkylthio)benzimidazoles
AU Yeh, Chih-Ming; Sun, Chung-Ming
CS Department of Chemistry, National Dong Hwa University, Hualien, 974,
Taiwan
SO Tetrahedron Lett. (1999), 40(40), 7247-7250
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
GI



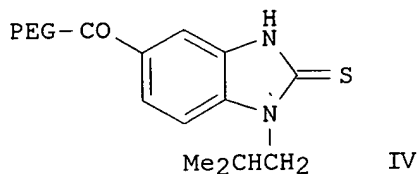
I



II



III



IV

AB An efficient liq.-phase synthesis of Me 2-(alkylthio)benzimidazole-5-carboxylates I [R = Et, Pr, allyl, NCCH2, Me2C:CHCH2, 2-cyclohexen-1-yl, 3-MeOC6H4CH2, 4-O2NC6H4CH2, 4-MeO2CC6H4CH2, 2-naphthylmethyl, Me2C:CH(CH2)2CMe:CHCH2] is described. 4-Fluoro-3-nitrobenzoic acid immobilized on polyethyleneglycol [PEG, HO(CH2CH2O)nH] polymer support (II) undergoes nucleophilic addn. of primary amine to afford PEG-supported

4-(isobutylamino)-3-nitrobenzoate III. Subsequent redn. of the arom. nitro group followed by cyclization with 1,1'-thiocarbonyldiimidazole gives PEG-bound benzimidazole-2-thione IV. S-Alkylation of polymer-supported scaffold IV followed by cleavage gives the resulting benzimidazoles I in high yield and high purity.

IT 246226-20-0P 246226-23-3P

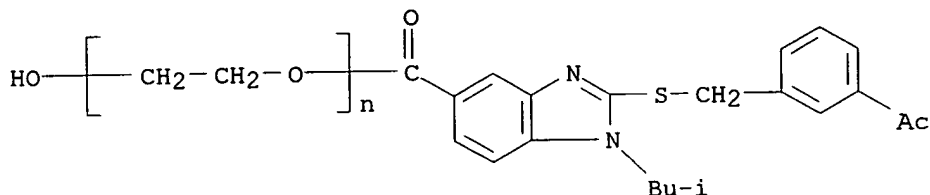
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(liq. phase synthesis of (alkylthio)benzimidazolecarboxylates from isobutylbenzimidazolethione immobilized on PEG and alkyl or benzylic halides)

RN 246226-20-0 CAPLUS

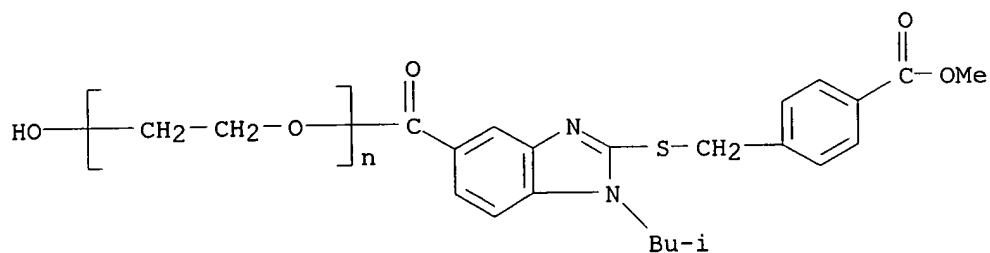
CN Poly(oxy-1,2-ethanediyl),
.alpha.-[[2-[[3-(3-acetylphenyl)methyl]thio]-1-(2-

09/743483

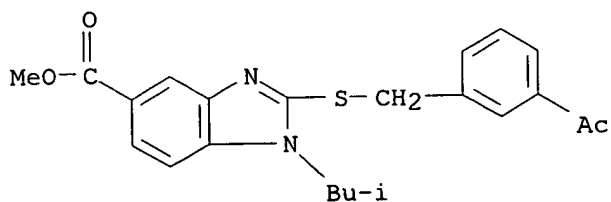
methylpropyl)-1H-benzimidazol-5-yl]carbonyl]-.omega.-hydroxy- (9CI) (CA INDEX NAME)



RN 246226-23-3 CAPLUS
CN Poly(oxy-1,2-ethanediyl),
.alpha.-[[2-[[[4-(methoxycarbonyl)phenyl]methyl]
thio]-1-(2-methylpropyl)-1H-benzimidazol-5-yl]carbonyl]-.omega.-hydroxy-
(9CI) (CA INDEX NAME)

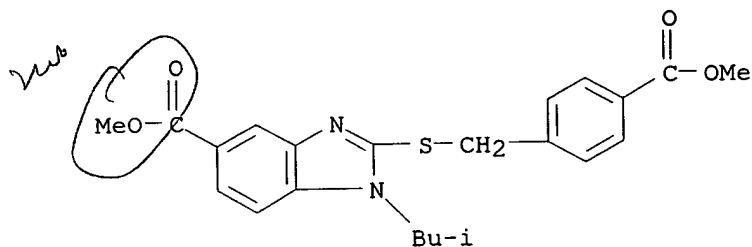


IT 246226-33-5P 246226-36-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(liq. phase synthesis of (alkylthio)benzimidazolecarboxylates from
isobutylbenzimidazolethione immobilized on PEG and alkyl or benzylic
halides)
RN 246226-33-5 CAPLUS
CN 1H-Benzimidazole-5-carboxylic acid,
2-[[[3-acetylphenyl]methyl]thio]-1-(2-
methylpropyl)-, methyl ester (9CI) (CA INDEX NAME)



RN 246226-36-8 CAPLUS
CN 1H-Benzimidazole-5-carboxylic acid,
2-[[[4-(methoxycarbonyl)phenyl]methyl]
thio]-1-(2-methylpropyl)-, methyl ester (9CI) (CA INDEX NAME)

09/743483



RE.CNT 19

RE

- (3) Cereda, E; Eur J Med Chem 1987, V22, P527 CAPLUS
(4) Creswell, M; Tetrahedron 1998, V54, P3983 CAPLUS
(5) Dankwardt, S; Tetrahedron Lett 1995, V36, P4923 CAPLUS
(6) Han, H; Proc Natl Acad Sci USA 1995, V92, P6419 CAPLUS
(7) Kugishima, H; Heterocyclic Chem 1994, V31, P1557 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 21 CAPLUS COPYRIGHT 2001 ACS

AN 1999:557087 CAPLUS

DN 131:191922

TI Heat development photographic material

IN Suzuki, Akira

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 24 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11237711	A2	19990831	JP 1998-55931	19980220

OS MARPAT 131:191922

AB The title photog. material contains, on a support, a reducible Ag source, a reducing agent, a binder, and .gtoreq.1 compd. selected from ArcOCr1R2LnPUG [PUG = monovalent group which is released after processing and the corresponding PUG-H acts as an image stability-improving agent; L = OCO, OCH2; n = 0, 1; Ar = Ph, naphthyl; R1, R2 = H, alkyl, aryl, cyano, carbamoyl, acyl, alkoxycarbonyl, carboxyl group (salt)]. The material provides a high quality image with improved light fastness.

IT 240134-54-7

RL: MOA (Modifier or additive use); USES (Uses)

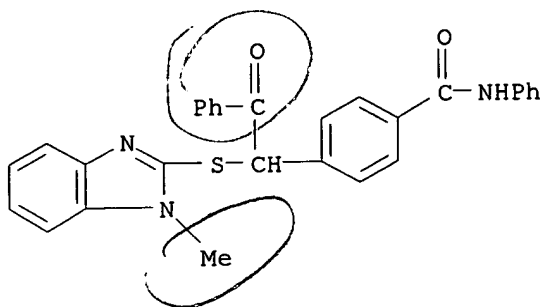
(light stabilizer; heat development photog. material contg. reducible silver source with light fastness)

RN 240134-54-7 CAPLUS

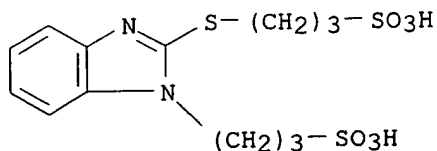
CN Benzamide,

4-[1-[(1-methyl-1H-benzimidazol-2-yl)thio]-2-oxo-2-phenylethyl]-
N-phenyl- (9CI) (CA INDEX NAME)

09/743483



L4 ANSWER 5 OF 21 CAPLUS COPYRIGHT 2001 ACS
AN 1998:150704 CAPLUS
DN 128:243993
TI Sulfoalkylation of ambidentic heterocyclic compounds with
1,3-propanesultone
AU Rastenyte, L.; Kupetis, G. K.; Eicher-Lorka, O.; Matijoska, A.
CS Inst. Chem., Vilnius, 2600, Lithuania
SO Chemija (1997), (4), 75-78
CODEN: CHMJES; ISSN: 0235-7216
PB Academia
DT Journal
LA English
OS CASREACT 128:243993
AB The investigation of sulfoalkylation reactions of ambidentic heterocyclic
compds. with N- and S- or N- and O-reactive centers with
1,3-propanesultone in homogeneous medium as well as in phase transfer
catalysis medium was carried out. The investigation showed that S-mono-
or N,S-disulfoalkyl derivs. are formed during the reaction of
N,S-ambidentic anions. Depending upon the conditions of the reaction,
2-pyridol and 8-quinolinol can form either N-or O-sulfoalkyl products.
IT 204845-40-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(sulfoalkylation of ambidentic heterocyclic compds. with
propanesultone)
RN 204845-40-9 CAPLUS
CN 1H-Benzimidazole-1-propanesulfonic acid, 2-[(3-sulfopropyl)thio]-,
disodium salt (9CI) (CA INDEX NAME)



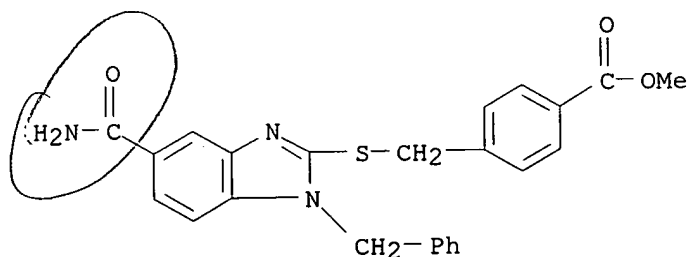
● 2 Na

L4 ANSWER 6 OF 21 CAPLUS COPYRIGHT 2001 ACS
AN 1998:49999 CAPLUS
DN 128:114905

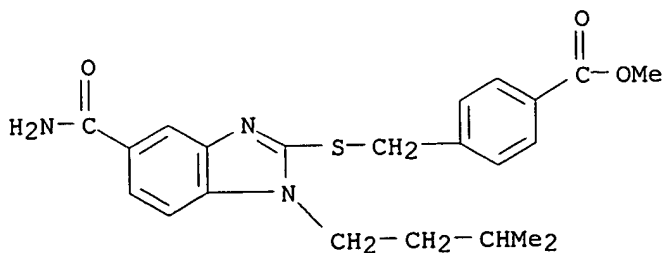
not 102
G = 1C
J = pub: alkyl 3-6 C
no def'n for pub

09/743483

TI Solid phase synthesis of 1-alkyl-2-alkylthio-5-carbamoylbenzimidazoles
AU Lee, Jung; Gauthier, Diane; Rivero, Ralph A.
CS R. W. Johnson Pharmaceutical Research Institute, Spring House, PA, 19447,
USA
SO Tetrahedron Lett. (1998), 39(3/4), 201-204
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 128:114905
AB The prepn. of 1-alkyl-2-alkylthio-5-carbamoylbenzimidazoles is described.
The cyclization of resin bound o-phenylenediamines with
thiocarbonyldiimidazole in THF provided resin bound benzimidazole-2-
thiones. Treatment of the latter with benzylic halides in the presence
of DIEA resulted in resin bound 1-alkyl-2-alkylthio-5-
carbamoylbenzimidazoles. The final products were cleaved from the resin
and obtained in 74-99% yields.
IT 201597-76-4P 201597-80-0P 201597-84-4P
201597-88-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(solid phase synthesis of benzimidazoles)
RN 201597-76-4 CAPLUS
CN Benzoic acid, 4-[[[5-(aminocarbonyl)-1-(phenylmethyl)-1H-benzimidazol-2-
yl]thio]methyl]-, methyl ester (9CI) (CA INDEX NAME)



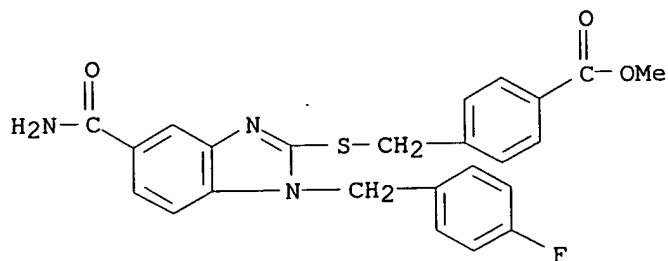
RN 201597-80-0 CAPLUS
CN Benzoic acid, 4-[[[5-(aminocarbonyl)-1-(3-methylbutyl)-1H-benzimidazol-2-
yl]thio]methyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 201597-84-4 CAPLUS
CN Benzoic acid, 4-[[[5-(aminocarbonyl)-1-[(4-fluorophenyl)methyl]-1H-

09/743483

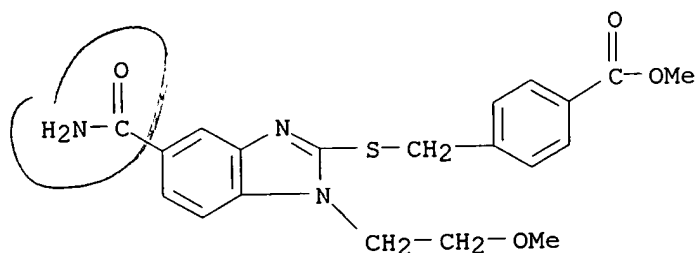
benzimidazol-2-yl]thio]methyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 201597-88-8 CAPLUS

CN Benzoic acid,

4-[[[5-(aminocarbonyl)-1-(2-methoxyethyl)-1H-benzimidazol-2-yl]thio]methyl]-, methyl ester (9CI) (CA INDEX NAME)



L4 ANSWER 7 OF 21 CAPLUS COPYRIGHT 2001 ACS

AN 1995:410651 CAPLUS

DN 122:187610

TI Preparation of 4-phenylquinolines and 4-phenylquinazoline as bone resorption inhibitors

IN Sohda, Takashi; Taketomi, Shigehisa; Baba, Atsuo

PA Takeda Chemical Industries, Ltd., Japan

SO Eur. Pat. Appl., 85 pp.

CODEN: EPXXDW

DT Patent

LA English

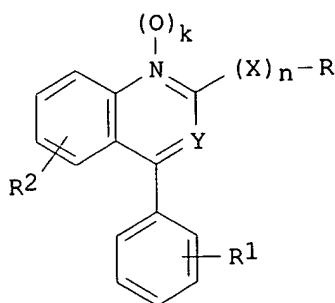
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 634169	A1	19950118	EP 1994-109861	19940625
	EP 634169	B1	20000105		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	AT 188377	E	20000115	JP 1993-158652	19930629
				AT 1994-109861	19940625
				JP 1993-158652	19930629
	CA 2126966	AA	19941230	CA 1994-2126966	19940628
				JP 1993-158652	19930629
	JP 07069890	A2	19950314	JP 1994-146045	19940628
				JP 1993-158652	19930629

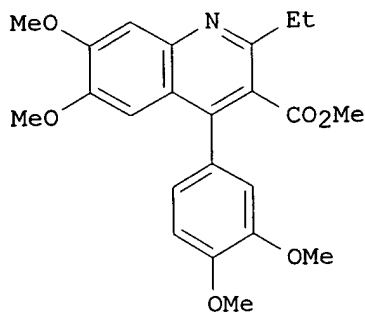
09/743483

US 5719157	A	19980217	US 1996-756189	19961125
			JP 1993-158652	19930629
			US 1994-265793	19940627
US 5852039	A	19981222	US 1997-783079	19970115
			JP 1993-158652	19930629
			US 1994-265793	19940627
			US 1996-756189	19961125

OS MARPAT 122:187610
GI



I



II

AB The title compds., 4-phenylquinolines, 4-phenylquinazolines, 4-phenylquinoline 1-oxides and 4-phenylquinazoline 1-oxides I (R = alkyl, heterocyclic group, etc.; R1, R2 = H, alkyl, etc.; n, k = 0, 1; Y = nitrogen, methine) were disclosed as pharmaceuticals for preventing

or

treating osteoporosis and inhibiting bone resorption. A specifically claimed example compd. was Me 4-(3,4-dimethoxyphenyl)-2-ethyl-6,7-dimethoxy-3-quinolinecarboxylate (II).

IT

153395-30-3P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of (phenyl)quinolines or (phenyl)quinazolines bone resorption inhibitors)

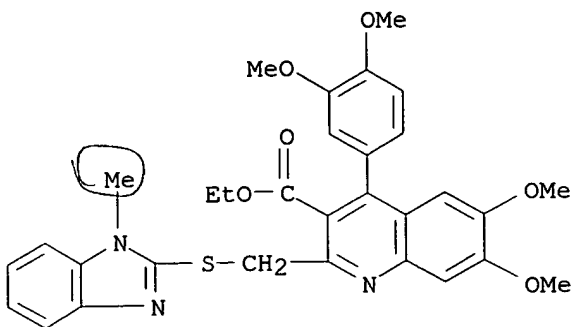
RN

153395-30-3 CAPLUS

CN

3-Quinolinecarboxylic acid, 4-(3,4-dimethoxyphenyl)-6,7-dimethoxy-2-[[[1-methyl-1H-benzimidazol-2-yl]thio]methyl]-, ethyl ester (9CI) (CA INDEX NAME)

09/743483



L4 ANSWER 8 OF 21 CAPLUS COPYRIGHT 2001 ACS.
 AN 1994:655818 CAPLUS
 DN 121:255818
 TI Pharmaceutical composition containing quinoline and quinazoline
 derivatives and novel compounds therefor
 IN Sohda, Takashi; Makino, Haruhiko; Baba, Atsuo
 PA Takeda Chemical Industries, Ltd., Japan
 SO Can. Pat. Appl., 99 pp.
 CODEN: CPXXEB

DT Patent
 LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CA 2094774	AA	19931025	CA 1993-2094774	19930423
				JP 1992-106424 A	19920424
				JP 1992-121887 A	19920514
				JP 1992-285865 A	19921023
				JP 1992-37952 A	19930226
	JP 09169734	A2	19970630	JP 1997-11420	19930422
				JP 1992-106424 A	19920424
				JP 1992-121887 A	19920514
				JP 1992-285865 A	19921023
				JP 1993-37952 A	19930226
				JP 1993-95780 A3	19930422
	CN 1223115	A	19990721	CN 1998-109507	19980529
				JP 1993-95780 A	19930422

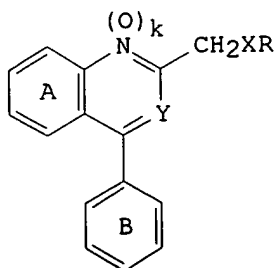
PATENT FAMILY INFORMATION:

FAN 1994:217712

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PI	EP 567107	A1	19931027	EP 1993-106521	19930422
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE			JP 1992-106424 A	19920424
				JP 1992-121887 A	19920514
				JP 1992-285865 A	19921023
				JP 1993-37952 A	19930226
	AU 9336991	A1	19931028	AU 1993-36991	19930416
	AU 656069	B2	19950119		
				JP 1992-106424 A	19920424
				JP 1992-121887 A	19920514
				JP 1992-285865 A	19921023

09/743483

US 5948782	A	19990907	JP 1993-37952 A 19930226
			US 1993-49500 19930421
			JP 1992-106424 A 19920424
			JP 1992-121887 A 19920514
			JP 1992-285865 A 19921023
			JP 1993-37952 A 19930226
NO 9301482	A	19931025	NO 1993-1482 19930422
			JP 1992-106424 A 19920424
			JP 1992-121887 A 19920514
			JP 1992-285865 A 19921023
			JP 1993-37952 A 19930226
			JP 1993-95780 19930422
JP 06306052	A2	19941101	JP 1992-106424 A 19920424
JP 2648434	B2	19970827	JP 1992-121887 A 19920514
			JP 1992-285865 A 19921023
			JP 1993-37952 A 19930226
			JP 1997-11420 19930422
JP 09169734	A2	19970630	JP 1992-106424 A 19920424
			JP 1992-121887 A 19920514
			JP 1992-285865 A 19921023
			JP 1993-37952 A 19930226
			JP 1993-95780 A319930422
HU 64322	A2	19931228	HU 1993-1197 19930423
			JP 1992-106424 A 19920424
			JP 1992-121887 A 19920514
			JP 1992-285865 A 19921023
			JP 1993-37952 A 19930226
RU 2130934	C1	19990527	RU 1993-4926 19930423
			JP 1992-106424 A 19920424
			JP 1992-121887 A 19920514
			JP 1992-285865 A 19921023
			JP 1993-37952 A 19930226
CN 1079222	A	19931208	CN 1993-104980 19930424
			JP 1992-106424 A 19920424
			JP 1993-37952 A 19930226
CN 1223115	A	19990721	CN 1998-109507 19980529
			JP 1993-95780 A 19930422
OS		MARPAT 121:255818	
GI			



I

AB Quinolines and quinazolines I [Y = N, C-G (G is carboxyl which may be esterified); X = optionally oxidized S, O, alkylene; R = optionally

09/743483

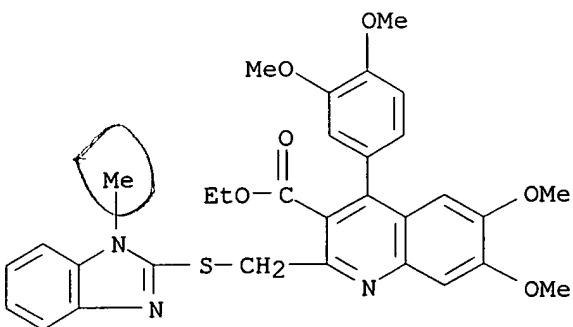
substituted hydrocarbon or heterocyclic group; A and B rings may optionally have at least one substituent; k = 0, 1] were prepd. and are antiinflammatory agent (test data given). Thus, treating Et 2-chloromethyl-6-7-dimethoxy-4-(3,4-dimethoxyphenyl)quinoline-3-carboxylate with 1-ethyl-2-mercaptoimidazole gave 78% Et 2-[(1-ethylimidazol-2-yl)thiomethyl]-6-7-dimethoxy-4-(3,4-dimethoxyphenyl)quinoline-3-carboxylate.

IT 153395-30-3P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as antiinflammatory agents)

RN 153395-30-3 CAPLUS

CN 3-Quinolinecarboxylic acid, 4-(3,4-dimethoxyphenyl)-6,7-dimethoxy-2-[(1-methyl-1H-benzimidazol-2-yl)thio]methyl]-, ethyl ester (9CI) (CA INDEX NAME)



L4 ANSWER 9 OF 21 CAPLUS COPYRIGHT 2001 ACS

AN 1994:217712 CAPLUS

DN 120:217712

TI Quinoline- and quinazoline-derivative antiarthritics and analgesics

IN Sohda, Takashi; Makino, Haruhiko; Baba, Atsuo

PA Takeda Chemical Industries, Ltd., Japan

SO Eur. Pat. Appl., 48 pp.

CODEN: EPXXDW

DT Patent

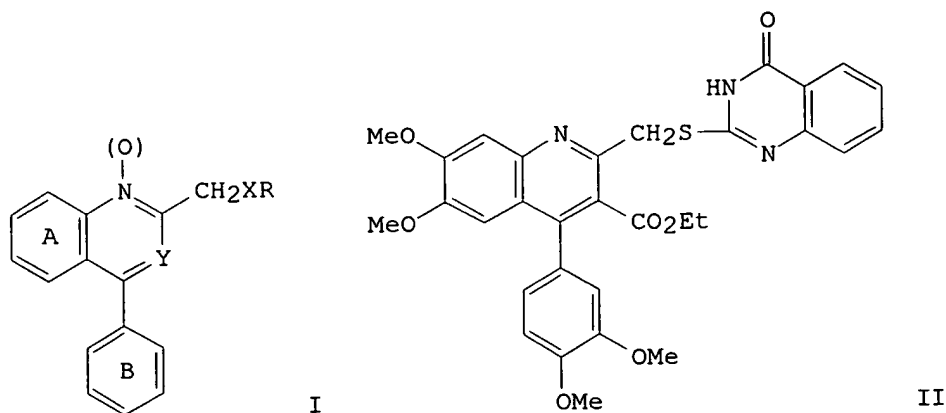
LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	EP 567107	A1	19931027	EP 1993-106521	19930422
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
				JP 1992-106424 A	19920424
				JP 1992-121887 A	19920514
				JP 1992-285865 A	19921023
				JP 1993-37952 A	19930226
	AU 9336991	A1	19931028	AU 1993-36991	19930416
	AU 656069	B2	19950119		
				JP 1992-106424 A	19920424
				JP 1992-121887 A	19920514
				JP 1992-285865 A	19921023
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	US 5948782	A	19990907	US 1993-49500	19930421

09/743483

NO 9301482	A	19931025	JP 1992-106424 A 19920424
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			JP 1992-285865 A 19921023
			JP 1993-37952 A 19930226
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JP 06306052	A2	19941101	JP 1992-106424 A 19920424
JP 2648434	B2	19970827	JP 1992-121887 A 19920514
			JP 1992-285865 A 19921023
			JP 1993-37952 A 19930226
			JP 1997-11420 19930422
JP 09169734	A2	19970630	JP 1992-106424 A 19920424
			JP 1992-121887 A 19920514
			JP 1992-285865 A 19921023
			JP 1993-37952 A 19930226
			JP 1993-95780 A319930422
HU 64322	A2	19931228	HU 1993-1197 19930423
			JP 1992-106424 A 19920424
			JP 1992-121887 A 19920514
			JP 1992-285865 A 19921023
			JP 1993-37952 A 19930226
			RU 1993-4926 19930423
RU 2130934	C1	19990527	JP 1992-106424 A 19920424
			JP 1992-121887 A 19920514
			JP 1992-285865 A 19921023
			JP 1993-37952 A 19930226
			CN 1993-104980 19930424
CN 1079222	A	19931208	JP 1992-106424 A 19920424
			JP 1993-37952 A 19930226
CN 1223115	A	19990721	CN 1998-109507 19980529
			JP 1993-95780 A 19930422
PATENT FAMILY INFORMATION:			
FAN	1994:655818		
	PATENT NO.	KIND	DATE
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PI	CA 2094774	AA	19931025
			CA 1993-2094774 19930423
			JP 1992-106424 A 19920424
			JP 1992-121887 A 19920514
			JP 1992-285865 A 19921023
			JP 1992-37952 A 19930226
			JP 1997-11420 19930422
			JP 1992-106424 A 19920424
			JP 1992-121887 A 19920514
			JP 1992-285865 A 19921023
			JP 1993-37952 A 19930226
			JP 1993-95780 A319930422
			CN 1998-109507 19980529
			JP 1993-95780 A 19930422
OS	MARPAT 120:217712		
GI			



AB The title compds. I [ring A and B may optionally have .gtoreq.1 substituent; R = (un)substituted hydrocarbon group, (un)substituted heterocyclic group having a ring-constituting C atom attached to X; X = optionally oxidized S atom, O, (CH₂)_q; q = 1-5; Y = N, CG; G = carboxyl which may be esterified; k = 0, 1], useful as antiinflammatory agents and analgesics in the treatment of arthritis, are prepd. Thus, quinazoline deriv. II (m.p. 183-184.degree.) was prepd. in 81% yield and demonstrated 36% swelling inhibitory rate when administered in a 50 mg/kg dosage in the

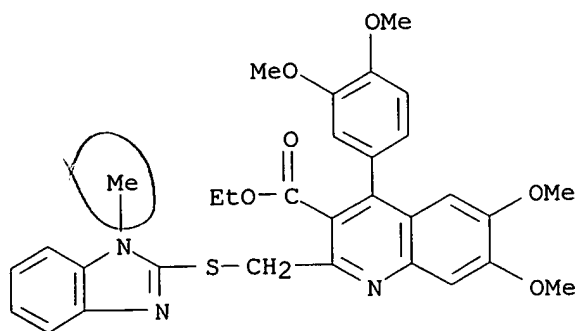
rat carrageenin paw edema-inhibitory activity test.

IT **153395-30-3P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and antiarthritic and analgesic activity of)

RN 153395-30-3 CAPLUS

CN 3-Quinolinecarboxylic acid, 4-(3,4-dimethoxyphenyl)-6,7-dimethoxy-2-[[1-methyl-1H-benzimidazol-2-yl]thio]methyl]-, ethyl ester (9CI) (CA INDEX NAME)



L4 ANSWER 10 OF 21 CAPLUS COPYRIGHT 2001 ACS

AN 1993:560315 CAPLUS

DN 119:160315

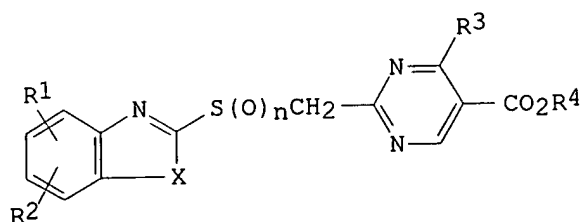
TI Preparation of 4-amino-5-pyrimidinecarboxylic acids as ulcer inhibitors

IN Shimamura, Hiroshi; Terajima, Koji; Kawase, Akito; Ishizuka, Yasuhiro;

09/743483

Kimura, Isami; Kanya, Akyoshi; Kataoka, Mikiko; Sato, Makoto
PA Morishita Ruseru Kk, Japan
SO Jpn. Kokai Tokkyo Koho, 24 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05112559	A2	19930507	JP 1991-299822	19911018
OS	MARPAT 119:160315				
GI					



I

AB The title compds. I [R₁, R₂ = H, lower (halo)alkyl, lower alkoxy, halo;

R₃ = NR₅R₆, .gtoreq.1 N-contg. (substituted) (un)satd. heterocyclyl; R₄ = H, lower alkyl; R₅, R₆ = H, lower (alkoxy)alkyl, alkenyl, or alkynyl, cycloalkyl, hydroxyalkyl, (substituted) Ph or benzyl; X = NR₇, O, S; R₇ = H, lower alkyl; n = 0-2; if R₁ = R₂ = H, X = NH, and n = 1, then R₃ .noteq. NMe₂, NEtMe, nor morpholino] or their salts are prepd. I (R₁ =

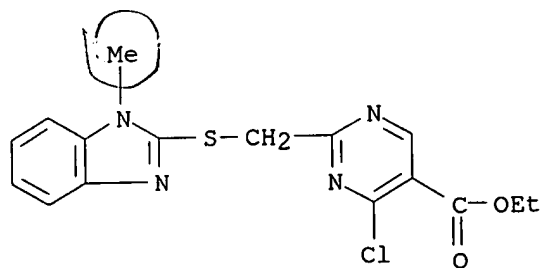
R₂ = H, R₃ = Cl, R₄ = Et, X = NH, n = 0) (prepn. given) in THF was treated with aq. MeNH₂ at room temp. for 1 h to give 89% I (R₁ = R₂ = H, R₃ = NHMe, R₄ = Et, X = NH, n = 0). I (R₁ = Me, R₂ = H, R₃ = NMe₂, R₄ = Et, X = NH, n = 1) (II) showed 92% inhibition of acute gastric mucosal damage caused by EtOH, vs. 90%, for omeprazole. A tablet contg. II was formulated.

IT 150065-44-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and amination of)

RN 150065-44-4 CAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-chloro-2-[[[1-methyl-1H-benzimidazol-2-yl]thio]methyl]-, ethyl ester (9CI) (CA INDEX NAME)



Me → Ca.

n=0
A=alkyl

103
G=1
J=C3-6

Ca.

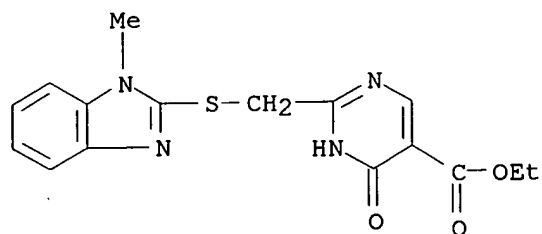
09/743483

IT 150065-33-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and chlorination of)

RN 150065-33-1 CAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,4-dihydro-2-[[[1-methyl-1H-benzimidazol-2-yl)thio]methyl]-4-oxo-, ethyl ester (9CI) (CA INDEX NAME)

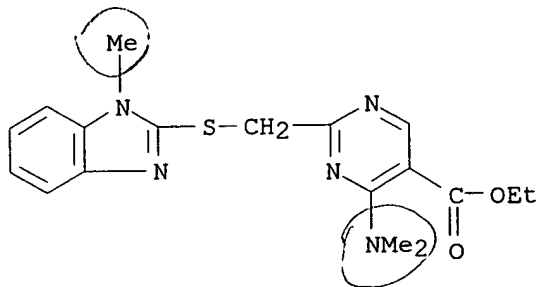


IT 150064-45-2P 150065-20-6P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as ulcer inhibitor)

RN 150064-45-2 CAPLUS

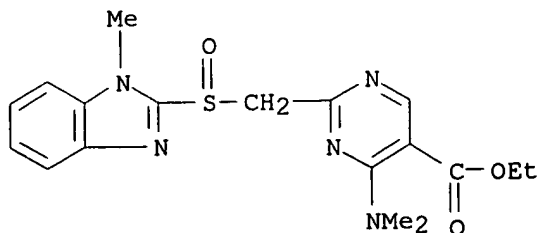
CN 5-Pyrimidinecarboxylic acid, 4-(dimethylamino)-2-[[[1-methyl-1H-benzimidazol-2-yl)thio]methyl]-, ethyl ester (9CI) (CA INDEX NAME)



not very good

RN 150065-20-6 CAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(dimethylamino)-2-[[[1-methyl-1H-benzimidazol-2-yl)sulfinyl]methyl]-, ethyl ester (9CI) (CA INDEX NAME)



L4 ANSWER 11 OF 21 CAPLUS COPYRIGHT 2001 ACS
AN 1993:472538 CAPLUS

09/743483

DN 119:72538

TI Synthesis and structure-activity relationships of novel benzimidazole and imidazo[4,5-b]pyridine acid derivatives as thromboxane A₂ receptor antagonists

AU Nicolai, Eric; Goyard, Joel; Benchetrit, Thierry; Teulon, Jean Marie; Caussade, Francois; Virone, Angela; Delchambre, Chantal; Cloarec, Alix

CS Carpiem, Rueil Malmaison, 92500, Fr.

SO J. Med. Chem. (1993), 36(9), 1175-87

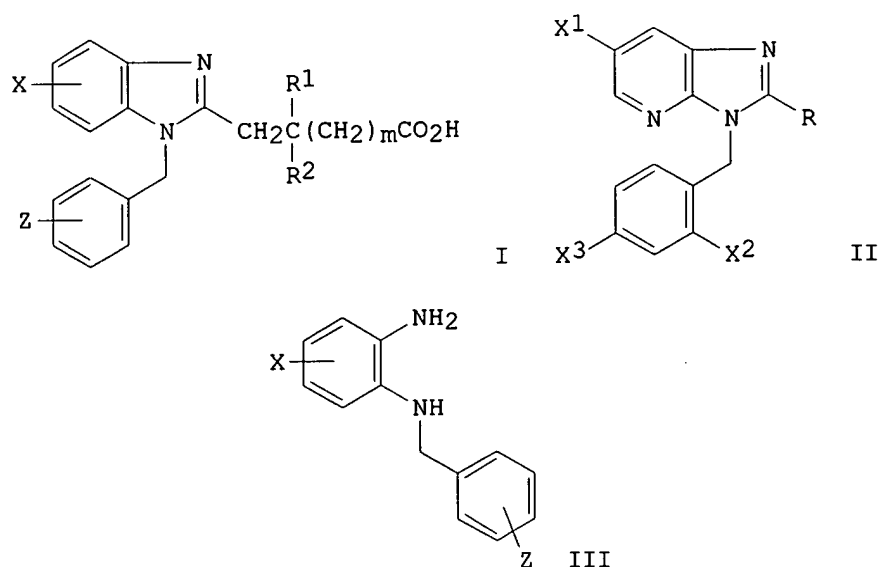
CODEN: JMCMAR; ISSN: 0022-2623

DT Journal

LA English

GI

MD 144P.



AB A series of 1-benzylbenzimidazoles, e.g., I (R₁ = Me, H, R₂ = Me, H; R₁R₂

= (CH₂)₄, (CH₂)₄, (CH₂)₅; m = 0, 1; X = 5-F, 5-Cl, 5-OMe, Z = 4-halo, 4-SMe, 4-OMe], and 3-benzylimidazo[4,5-b]pyridines II (X₁ = Cl, H, X₂ =

H,

F, X₃ = Cl, Br, SMe; R = S(CH₂)₃CO₂H, SCMe₂CO₂H, CH₂CMe₂CH₂CO₂H) substituted in the 2-position by an alkanolic or mercaptoalkanoic acid chain was synthesized for evaluation as potential thromboxane A₂/prostaglandin H₂ (TXA₂/PGH₂) receptor antagonists. Thus, (benzylamino)anilines III cyclized with ClCOCH₂CR₁R₂(CH₂)_mCO₂Et to give (benzylbenzimidazolyl)alkanoates which were hydrolyzed to give I. The affinity of each compd. for washed human platelet TXA₂/PGH₂ receptors was detd. by radioligand binding studies using [¹²⁵I]PTA-OH.

Structure-activity relationships led to the conclusions that 2-alkanoic acid derivs. were slightly more potent than 2-mercaptoalkanoic acids and that compds. possessing a 3,3-dimethylbutanoic acid in the 2-position

were

definitely the most potent with K_i values of 4-39 nM. The replacement of this 3,3-dimethylbutanoic acid side chain by a shorter one led to a

marked

09/743483

decrease of affinity ($K_i = 5600$ and 1700 nM). Compds. of benzimidazole and imidazo[4,5-b]pyridines series displayed similar potencies. The interesting pharmacol. profile of compd. (UP 116-77: 4-[3-[(4-chlorophenyl)methyl]-6-chloroimidazo[4,5-b]pyridin-2-yl]-3,3-dimethylbutanoic acid) and its excellent tolerance led us to select this deriv. for further development.

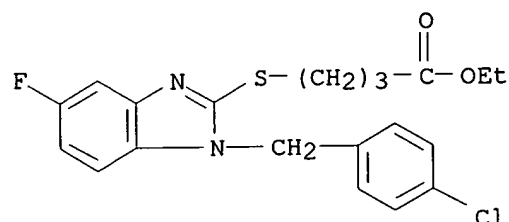
IT 136122-57-1P 136122-58-2P 136122-59-3P

136122-61-7P 147643-72-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and hydrolysis of)

RN 136122-57-1 CAPLUS

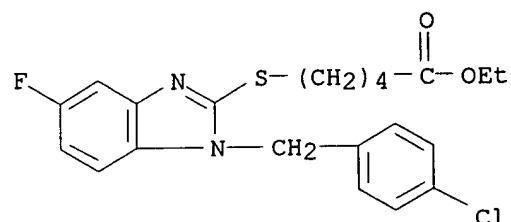
CN Butanoic acid, 4-[[1-[(4-chlorophenyl)methyl]-5-fluoro-1H-benzimidazol-2-yl]thio]-, ethyl ester (9CI) (CA INDEX NAME)



RN 136122-58-2 CAPLUS

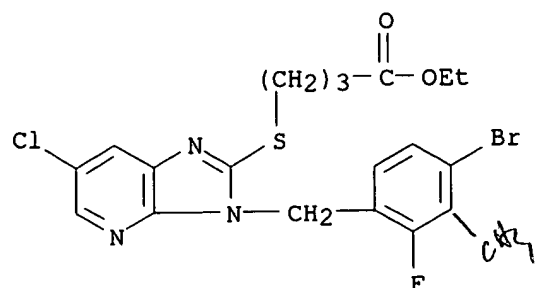
CN Pentanoic acid,

5-[[1-[(4-chlorophenyl)methyl]-5-fluoro-1H-benzimidazol-2-yl]thio]-, ethyl ester (9CI) (CA INDEX NAME)

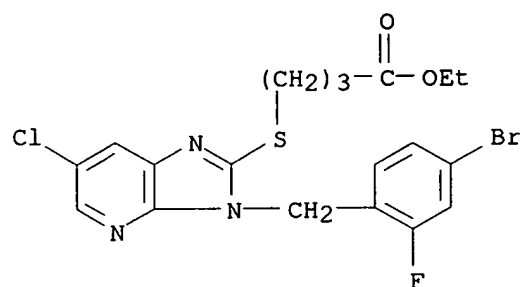


RN 136122-59-3 CAPLUS

CN Butanoic acid, 4-[[3-[(4-bromo-2-fluorophenyl)methyl]-6-chloro-3H-imidazo[4,5-b]pyridin-2-yl]thio]-, ethyl ester (9CI) (CA INDEX NAME)

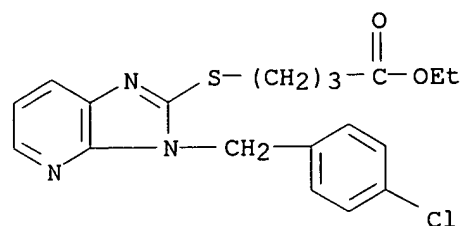


09/743483



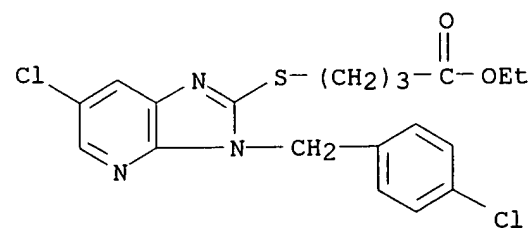
RN 136122-61-7 CAPLUS

CN Butanoic acid, 4-[[3-[(4-chlorophenyl)methyl]-3H-imidazo[4,5-b]pyridin-2-yl]thio]-, ethyl ester (9CI) (CA INDEX NAME)



RN 147643-72-9 CAPLUS

CN Butanoic acid, 4-[[6-chloro-3-[(4-chlorophenyl)methyl]-3H-imidazo[4,5-b]pyridin-2-yl]thio]-, ethyl ester (9CI) (CA INDEX NAME)



IT 136122-19-5P 136122-20-8P 136122-24-2P

136145-09-0P 147643-94-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

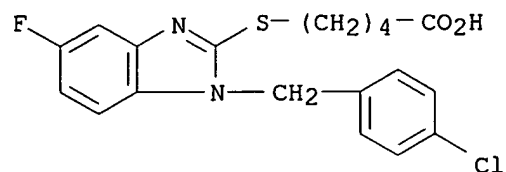
(prepn. and thromboxane receptor antagonist activity of)

RN 136122-19-5 CAPLUS

CN Pentanoic acid,

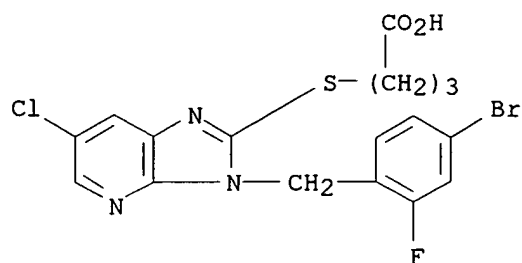
5-[[1-[(4-chlorophenyl)methyl]-5-fluoro-1H-benzimidazol-2-yl]thio]- (9CI) (CA INDEX NAME)

09/743483



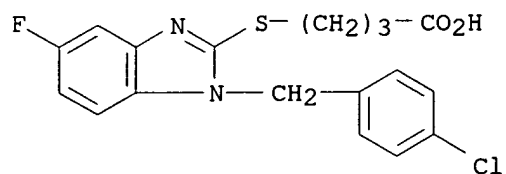
RN 136122-20-8 CAPLUS

CN Butanoic acid, 4-[[3-[(4-bromo-2-fluorophenyl)methyl]-6-chloro-3H-imidazo[4,5-b]pyridin-2-yl]thio]- (9CI) (CA INDEX NAME)



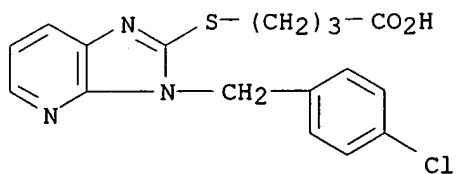
RN 136122-24-2 CAPLUS

CN Butanoic acid, 4-[[1-[(4-chlorophenyl)methyl]-5-fluoro-1H-benzimidazol-2-yl]thio]- (9CI) (CA INDEX NAME)



RN 136145-09-0 CAPLUS

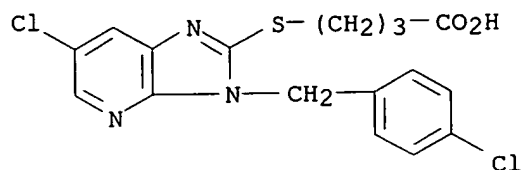
CN Butanoic acid, 4-[[3-[(4-chlorophenyl)methyl]-3H-imidazo[4,5-b]pyridin-2-yl]thio]- (9CI) (CA INDEX NAME)



RN 147643-94-5 CAPLUS

CN Butanoic acid, 4-[[6-chloro-3-[(4-chlorophenyl)methyl]-3H-imidazo[4,5-b]pyridin-2-yl]thio]- (9CI) (CA INDEX NAME)

09/743483



L4 ANSWER 12 OF 21 CAPLUS COPYRIGHT 2001 ACS
 AN 1993:234055 CAPLUS
 DN 118:234055
 TI Preparation of (aza)benzimidazole derivatives which are thromboxane
 receptor antagonists
 IN Bru-Magniez, Nicole; Nicolai, Eric; Teulon, Jean Marie
 PA Laboratoires UPSA, Fr.
 SO U.S., 31 pp. Cont.-in-part of U.S. 5,021,443.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5124336	A	19920623	US 1991-650732	19910205
				FR 1990-1925	19900216
				US 1990-493880	19900315
	FR 2658511	A1	19910823	FR 1990-1925	19900216
	FR 2658511	B1	19920619		
	US 5021443	A	19910604	US 1990-493880	19900315
				FR 1990-1925	19900216

PATENT FAMILY INFORMATION:

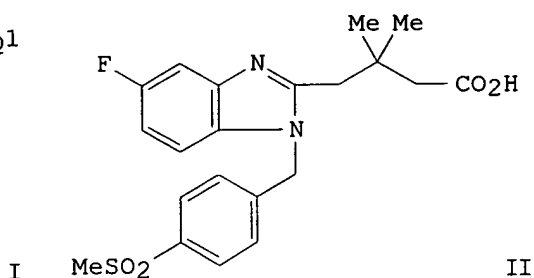
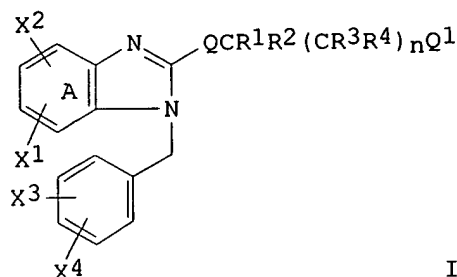
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5021443	A	19910604	US 1990-493880	19900315
				FR 1990-1925	19900216
				FR 1990-1925	19900216
	FR 2658511	A1	19910823		
	FR 2658511	B1	19920619		
	CA 2035710	AA	19910817	CA 1991-2035710	19910205
				FR 1990-1925	19900216
	US 5124336	A	19920623	US 1991-650732	19910205
				FR 1990-1925	19900216
				US 1990-493880	19900315
	US 5128359	A	19920707	US 1991-650742	19910205
				FR 1990-1925	19900216
				US 1990-493880	19900315
	AU 9170874	A1	19910822	AU 1991-70874	19910207
	AU 638096	B2	19930617		
				FR 1990-1925	19900216
	IL 97191	A1	19950315	IL 1995-97191	19910208
				FR 1990-1925	19900216
	ZA 9101061	A	19911127	ZA 1991-1061	19910213
				FR 1990-1925	19900216
	EP 442820	A1	19910821	EP 1991-400393	19910215
	EP 442820	B1	19950913		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

09/743483

			FR 1990-1925	19900216
JP 05155858	A2	19930622	JP 1991-42378	19910215
			FR 1990-1925	19900216
ES 2080919	T3	19960216	ES 1991-400393	19910215
			FR 1990-1925	19900216
LV 11028	B	19960620	LV 1995-309	19951012
			FR 1990-1925	19900216

OS MARPAT 118:234055
GI



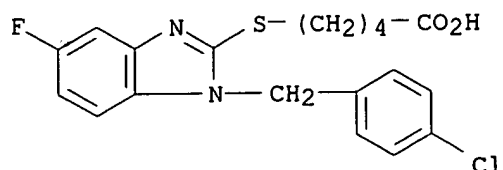
AB Title compds. [I; A = arom. ring, N heterocycle; X1 - X4 = H, halo, (cyclo)alkyl, halo, alkoxy, alkylthio, alkylsulfonyl, alkylsufinyl, CF3, NO2, OH, CO2H, alkoxy carbonyl, etc.; or X3X4 = benzo ring; Q = CR5R6, S; R5, R6 = H, (cyclo)alkyl; R1-R4 = H, (cyclo)alkyl; CR1R2 or CR3R4 can form a cycloalkyl or cycloalkene ring with Q; or R1R2, R3R4 = atoms to form rings; n = 0-4; Q1 = CO2R7, CONHR8, cyano; or R7, R8 = H, (cyclo)alkyl], were prepd. Thus, 4-[1-(4-methylthiobenzyl)-5-fluorobenzimidazol-2-yl]-3,3-dimethylbutanoic acid (prepn. given) was stirred with 3-ClC6H4CO2OH

in MeOH at 0.degree. to room temp. to give title compd. (II). II inhibited the binding of [125I]PTA-OH to TXA2 receptors of human platelets with Ki = 3.70 X10⁻⁸ M.

IT 136122-19-5P 136122-22-0P 136122-24-2P
136122-57-1P 136122-61-7P 136122-63-9P
136122-64-0P 136145-09-0P 144727-47-9P
144727-48-0P 144727-50-4P 144727-52-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as thromboxane receptor antagonist)

RN 136122-19-5 CAPLUS

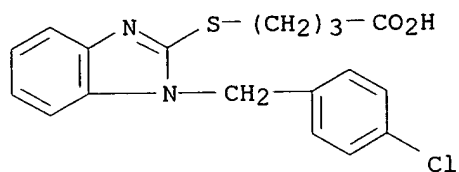
CN Pentanoic acid,
5-[[1-[4-(chlorophenyl)methyl]-5-fluoro-1H-benzimidazol-2-yl]thio]- (9CI) (CA INDEX NAME)



09/743483

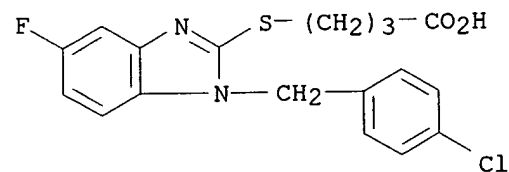
RN 136122-22-0 CAPLUS

CN Butanoic acid, 4-[[1-[(4-chlorophenyl)methyl]-1H-benzimidazol-2-yl]thio]-
(9CI) (CA INDEX NAME)



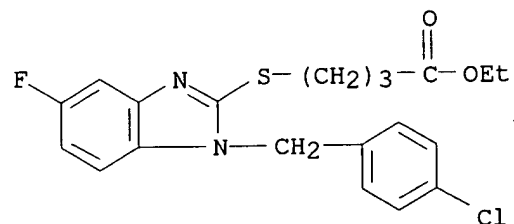
RN 136122-24-2 CAPLUS

CN Butanoic acid, 4-[[1-[(4-chlorophenyl)methyl]-5-fluoro-1H-benzimidazol-2-yl]thio]- (9CI) (CA INDEX NAME)



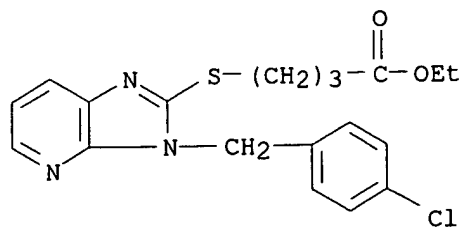
RN 136122-57-1 CAPLUS

CN Butanoic acid, 4-[[1-[(4-chlorophenyl)methyl]-5-fluoro-1H-benzimidazol-2-yl]thio]-, ethyl ester (9CI) (CA INDEX NAME)



RN 136122-61-7 CAPLUS

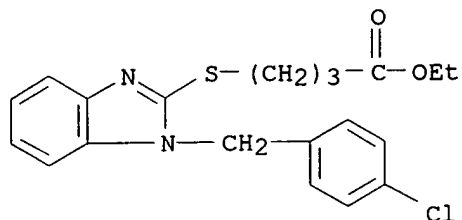
CN Butanoic acid, 4-[[3-[(4-chlorophenyl)methyl]-3H-imidazo[4,5-b]pyridin-2-yl]thio]-, ethyl ester (9CI) (CA INDEX NAME)



09/743483

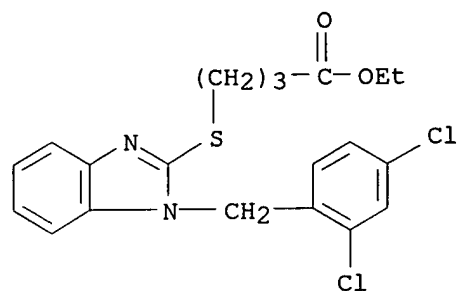
RN 136122-63-9 CAPLUS

CN Butanoic acid,
4-[[1-[(4-chlorophenyl)methyl]-1H-benzimidazol-2-yl]thio]-,
ethyl ester (9CI) (CA INDEX NAME)



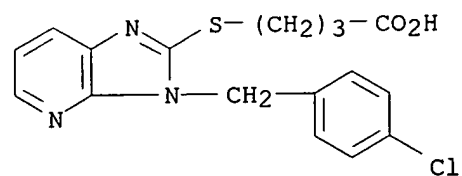
RN 136122-64-0 CAPLUS

CN Butanoic acid, 4-[[1-[(2,4-dichlorophenyl)methyl]-1H-benzimidazol-2-yl]thio]-, ethyl ester (9CI) (CA INDEX NAME)



RN 136145-09-0 CAPLUS

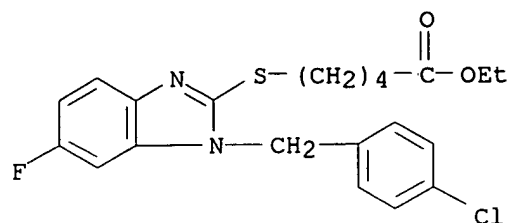
CN Butanoic acid, 4-[[3-[(4-chlorophenyl)methyl]-3H-imidazo[4,5-b]pyridin-2-yl]thio]- (9CI) (CA INDEX NAME)



RN 144727-47-9 CAPLUS

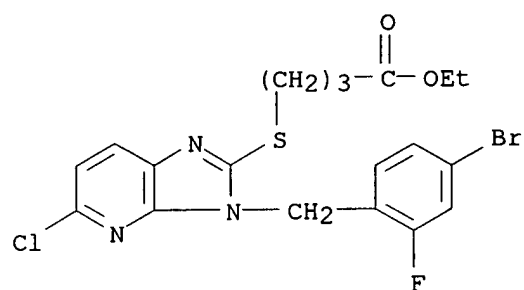
CN Pentanoic acid,
5-[[1-[(4-chlorophenyl)methyl]-6-fluoro-1H-benzimidazol-2-yl]thio]-, ethyl ester (9CI) (CA INDEX NAME)

09/743483



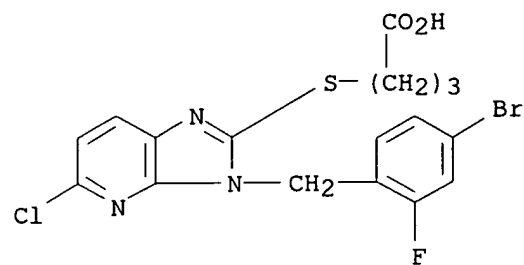
RN 144727-48-0 CAPLUS

CN Butanoic acid, 4-[[3-[(4-bromo-2-fluorophenyl)methyl]-5-chloro-3H-imidazo[4,5-b]pyridin-2-yl]thio]-, ethyl ester (9CI) (CA INDEX NAME)



RN 144727-50-4 CAPLUS

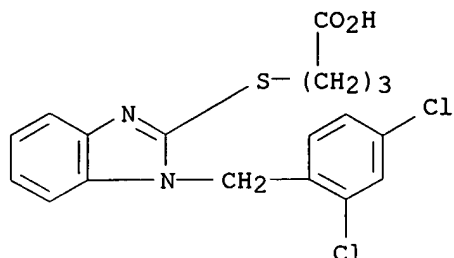
CN Butanoic acid, 4-[[3-[(4-bromo-2-fluorophenyl)methyl]-5-chloro-3H-imidazo[4,5-b]pyridin-2-yl]thio]- (9CI) (CA INDEX NAME)



RN 144727-52-6 CAPLUS

CN Butanoic acid, 4-[[1-[(2,4-dichlorophenyl)methyl]-1H-benzimidazol-2-yl]thio]- (9CI) (CA INDEX NAME)

09/743483



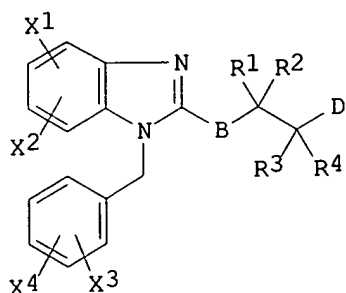
L4 ANSWER 13 OF 21 CAPLUS COPYRIGHT 2001 ACS
AN 1992:21043 CAPLUS
DN 116:21043
TI Preparation of 1-benzyl-2-carboxyalkylbenzimidazoles as thromboxane antagonists
IN Bru-Magnicz, Nicole; Nicolai, Eric; Teulon, Jean Marie
PA Laboratoires UPSA S. A., Fr.
SO U.S., 19 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	---	-----	-----
PI	US 5021443	A	19910604	US 1990-493880	19900315
				FR 1990-1925	19900216
	FR 2658511	A1	19910823	FR 1990-1925	19900216
	FR 2658511	B1	19920619		
	CA 2035710	AA	19910817	CA 1991-2035710	19910205
				FR 1990-1925	19900216
	US 5124336	A	19920623	US 1991-650732	19910205
				FR 1990-1925	19900216
				US 1990-493880	19900315
	US 5128359	A	19920707	US 1991-650742	19910205
				FR 1990-1925	19900216
				US 1990-493880	19900315
	AU 9170874	A1	19910822	AU 1991-70874	19910207
	AU 638096	B2	19930617		
				FR 1990-1925	19900216
	IL 97191	A1	19950315	IL 1995-97191	19910208
				FR 1990-1925	19900216
	ZA 9101061	A	19911127	ZA 1991-1061	19910213
				FR 1990-1925	19900216
	EP 442820	A1	19910821	EP 1991-400393	19910215
	EP 442820	B1	19950913		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
				FR 1990-1925	19900216
	JP 05155858	A2	19930622	JP 1991-42378	19910215
				FR 1990-1925	19900216
	ES 2080919	T3	19960216	ES 1991-400393	19910215
				FR 1990-1925	19900216
	LV 11028	B	19960620	LV 1995-309	19951012
				FR 1990-1925	19900216

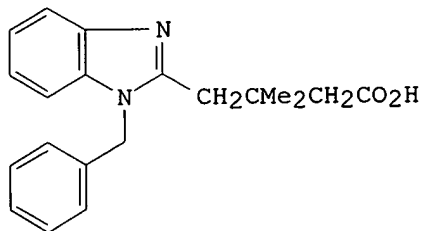
PATENT FAMILY INFORMATION:

09/743483

FAN	1993:234055				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5124336	A	19920623	US 1991-650732	19910205
				FR 1990-1925	19900216
				US 1990-493880	19900315
	FR 2658511	A1	19910823	FR 1990-1925	19900216
	FR 2658511	B1	19920619		
	US 5021443	A	19910604	US 1990-493880	19900315
				FR 1990-1925	19900216
OS	MARPAT 116:21043				
GI					



I



II

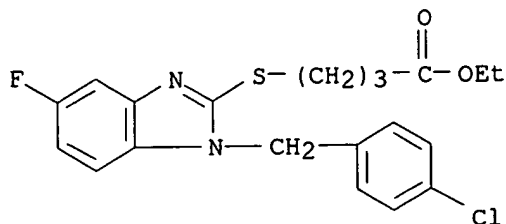
AB Title compds. [I; X1-X4 = H, halo, alkyl, alkoxy, alkylthio, CF₃, OH, NO₂ HOCH₂, CO₂H, alkoxycarbonyl, SO- or SO₂-contg. groups; X3X4 = CH:CHCH:CH; B = CR₅R₆, S; R1-R9 = H, alkyl; R1R2, R3R4 = atoms to form C3-6 rings; CR1R2CR5R6, CR3R4CR5R6 = C3-7 cycloalkyl; D = CO₂R₇, CONHR₈, cyano, PO(OR₉)₂, NHSO₂CF₃], were prepd. Thus, Et 4-(1-benzylbenzimidazol-2-yl)-3,3-dimethylbutanoate (prepn. given) was refluxed in HCl/HOAc/H₂O for 4 h to give title compd. II. I at 10-5M gave 60-100% displacement of [125I]PTA-OH from human platelets.

IT 136122-57-1P 136122-58-2P 136122-59-3P
136122-60-6P 136122-61-7P 136122-63-9P
136122-64-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as intermediate for (benzylbenzimidazolyl)alkyl
carboxylate
thromboxane antagonist)

RN 136122-57-1 CAPLUS

CN Butanoic acid, 4-[[1-[(4-chlorophenyl)methyl]-5-fluoro-1H-benzimidazol-2-yl]thio]-, ethyl ester (9CI) (CA INDEX NAME)

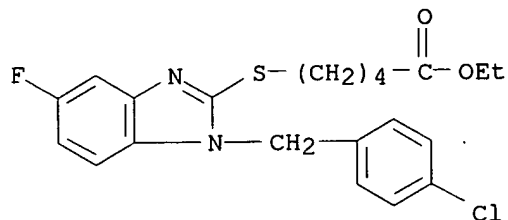


09/743483

RN 136122-58-2 CAPLUS

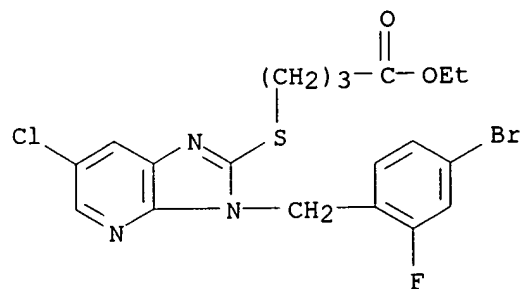
CN Pentanoic acid,

5-[[1-[(4-chlorophenyl)methyl]-5-fluoro-1H-benzimidazol-2-yl]thio]-, ethyl ester (9CI) (CA INDEX NAME)



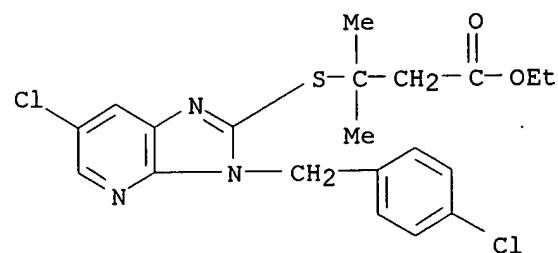
RN 136122-59-3 CAPLUS

CN Butanoic acid, 4-[[3-[(4-bromo-2-fluorophenyl)methyl]-6-chloro-3H-imidazo[4,5-b]pyridin-2-yl]thio]-, ethyl ester (9CI) (CA INDEX NAME)



RN 136122-60-6 CAPLUS

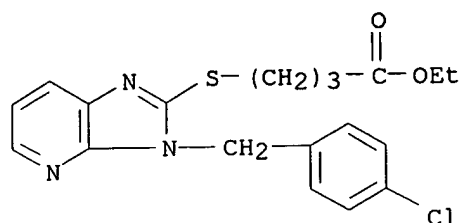
CN Butanoic acid, 3-[[6-chloro-3-[(4-chlorophenyl)methyl]-3H-imidazo[4,5-b]pyridin-2-yl]thio]-3-methyl-, ethyl ester (9CI) (CA INDEX NAME)



RN 136122-61-7 CAPLUS

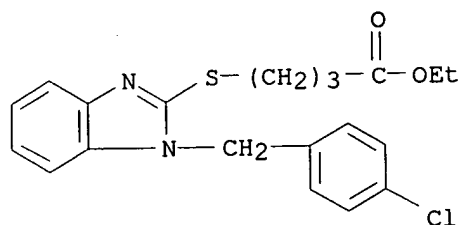
CN Butanoic acid, 4-[[3-[(4-chlorophenyl)methyl]-3H-imidazo[4,5-b]pyridin-2-yl]thio]-, ethyl ester (9CI) (CA INDEX NAME)

09/743483



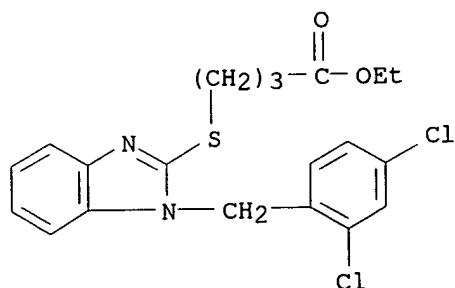
RN 136122-63-9 CAPLUS

CN Butanoic acid,
4-[[1-[(4-chlorophenyl)methyl]-1H-benzimidazol-2-yl]thio]-,
ethyl ester (9CI) (CA INDEX NAME)



RN 136122-64-0 CAPLUS

CN Butanoic acid, 4-[[1-[(2,4-dichlorophenyl)methyl]-1H-benzimidazol-2-yl]thio]-, ethyl ester (9CI) (CA INDEX NAME)



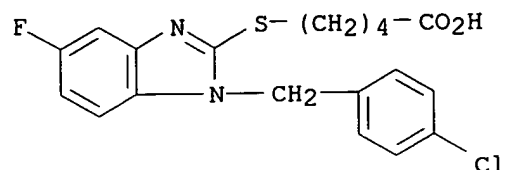
IT 136122-19-5P 136122-20-8P 136122-21-9P
136122-22-0P 136122-23-1P 136122-24-2P
136145-09-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as thromboxane antagonist)

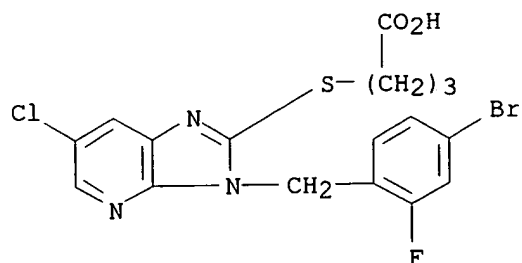
RN 136122-19-5 CAPLUS

CN Pentanoic acid,
5-[[1-[(4-chlorophenyl)methyl]-5-fluoro-1H-benzimidazol-2-yl]thio]- (9CI) (CA INDEX NAME)

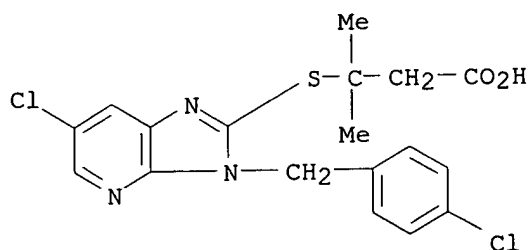
09/743483



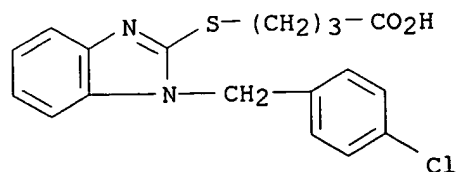
RN 136122-20-8 CAPLUS
CN Butanoic acid, 4-[[3-[(4-bromo-2-fluorophenyl)methyl]-6-chloro-3H-imidazo[4,5-b]pyridin-2-yl]thio]- (9CI) (CA INDEX NAME)



RN 136122-21-9 CAPLUS
CN Butanoic acid, 3-[[6-chloro-3-[(4-chlorophenyl)methyl]-3H-imidazo[4,5-b]pyridin-2-yl]thio]-3-methyl- (9CI) (CA INDEX NAME)

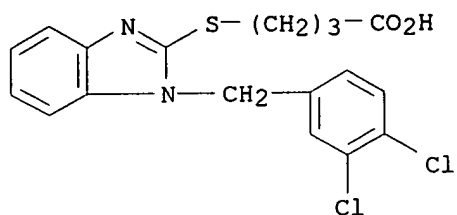


RN 136122-22-0 CAPLUS
CN Butanoic acid, 4-[[1-[(4-chlorophenyl)methyl]-1H-benzimidazol-2-yl]thio]- (9CI) (CA INDEX NAME)



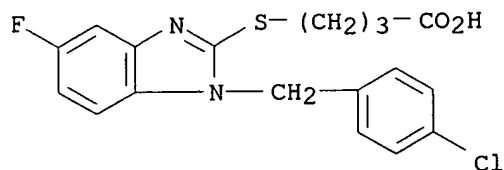
RN 136122-23-1 CAPLUS
CN Butanoic acid, 4-[[1-[(3,4-dichlorophenyl)methyl]-1H-benzimidazol-2-yl]thio]- (9CI) (CA INDEX NAME)

09/743483



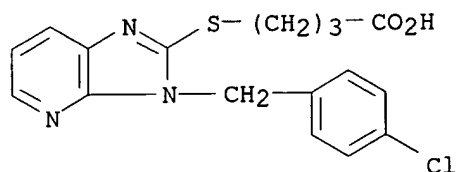
RN 136122-24-2 CAPLUS

CN Butanoic acid, 4-[[1-[(4-chlorophenyl)methyl]-5-fluoro-1H-benzimidazol-2-yl]thio]- (9CI) (CA INDEX NAME)



RN 136145-09-0 CAPLUS

CN Butanoic acid, 4-[[3-[(4-chlorophenyl)methyl]-3H-imidazo[4,5-b]pyridin-2-yl]thio]- (9CI) (CA INDEX NAME)



L4 ANSWER 14 OF 21 CAPLUS COPYRIGHT 2001 ACS

AN 1991:164100 CAPLUS

DN 114:164100

TI Studies on (H⁺-K⁺)-ATPase inhibitors of gastric acid secretion. Prodrugs of 2-[(2-pyridinylmethyl)sulfinyl]benzimidazole proton-pump inhibitors

AU Sih, John C.; Wha bin Im; Robert, Andre; Graber, David R.; Blakeman, David

P.

CS Res. Lab., Upjohn Co., Kalamazoo, MI, 49001, USA

SO J. Med. Chem. (1991), 34(3), 1049-62

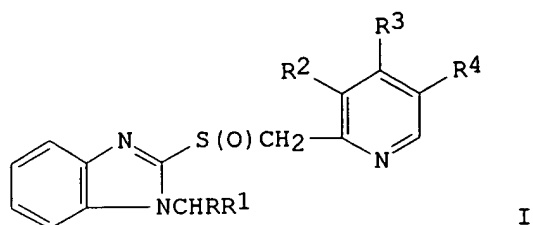
CODEN: JMCMAR; ISSN: 0022-2623

DT Journal

LA English

GI

09/743483



AB The synthesis of N-substituted benzimidazole (H⁺ -K⁺)-ATPase or proton-pump inhibitors is described. These compds. were prepd. to function as prodrugs of the parent N-H compd. and evaluated for their ability to inhibit gastric (H⁺-K⁺)-ATPase and gastric acid secretion.

The products reported rely on either in vivo esterase hydrolysis for liberation of the parent compd. or require an acid environment for release

of the active drug. The N-(acyloxy)alkyl-substituted benzimidazoles I [R = H, R1 = AcO; R2 = R3 = R4 = H; R2 = Me, R3 = SEt, R4 = H; R2 = R4 = Me, R3 = OMe (II)] showed improved chem. stability in the solid state and in aq. solns. when compared to their parent N-H compds. When given orally, II was found to be twice as potent as omeprazole in both the Shay rat and inactivation of gastric (H⁺-K⁺)-ATPase in the rat. The N-ethoxy-1-ethyl-substituted benzimidazoles I [R = Me, R1 = OEt; R2 = R3

= R4 = H (III); R2 = R4 = Me, R3 = OMe; R2 = Me, R3 = SEt, R4 = H] were found equally as effective as the N-H compd. for inhibition of rat (H⁺-K⁺)-ATPase activity. In the Shay rat III at 10 mg/kg was approx. twice as active as parent timoprazole.

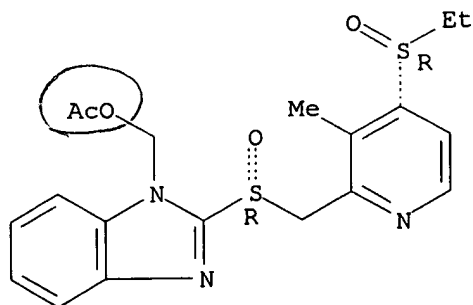
IT 132750-19-7P 132750-20-0P 132750-36-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 132750-19-7 CAPLUS

CN 1H-Benzimidazole-1-methanol, 2-[[[4-(ethylsulfinyl)-3-methyl-2-pyridinyl]methyl]sulfinyl]-, acetate (ester), (R*,R*)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



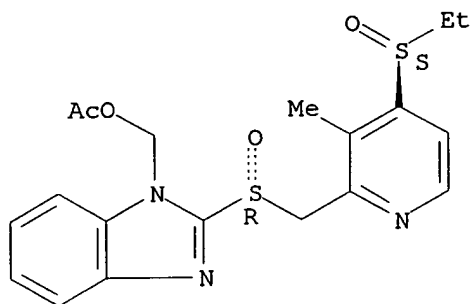
RN 132750-20-0 CAPLUS

CN 1H-Benzimidazole-1-methanol, 2-[[[4-(ethylsulfinyl)-3-methyl-2-

09/743483

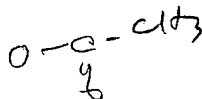
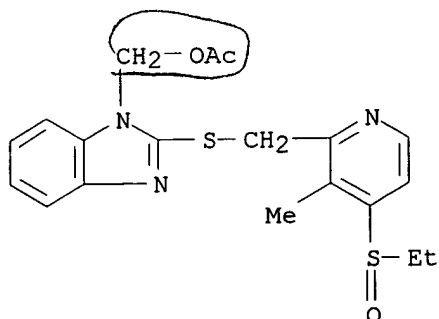
pyridinyl)methyl]sulfinyl]-, acetate (ester), (R*,S*)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 132750-36-8 CAPLUS

CN 1H-Benzimidazole-1-methanol, 2-[[[4-(ethylsulfinyl)-3-methyl-2-pyridinyl]methyl]thio]-, acetate (ester) (9CI) (CA INDEX NAME)



L4 ANSWER 15 OF 21 CAPLUS COPYRIGHT 2001 ACS

AN 1989:75153 CAPLUS

DN 110:75153

TI Cephalosporin derivatives, processes for their preparation, and antibacterial agents containing them.

IN Nakagawa, Susumu; Yamada, Koji; Nakano, Fumio; Otake, Norikazu; Asai, Akira; Kuroyanagi, Satoru; Tanaka, Yoshiharu; Ishikawa, Moriaki;

Ushijima,

Ryosuke; Mitomo, Ryuji

PA Banyu Pharmaceutical Co., Ltd., Japan

SO Eur. Pat. Appl., 81 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 241901	A2	19871021	EP 1987-105483	19870413
	EP 241901	A3	19890614		
	EP 241901	B1	19940824		

09/743483

R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE

			JP 1986-84079	19860414
			JP 1986-99440	19860501
			JP 1986-309178	19861227
			JP 1987-91292	19870414
JP 02256683	A2	19901017		
JP 2503500	B2	19960605		
			JP 1986-84079	19860414
			JP 1986-99440	19860501
			JP 1986-309178	19861227
US 5061794	A	19911029	US 1989-377086	19890710
			JP 1986-84079	19860414
			JP 1986-99440	19860501
			JP 1986-309178	19861227
			US 1987-38208	19870414
US 5225406	A	19930706	US 1991-753943	19910903
			US 1988-265458	19881013

PATENT FAMILY INFORMATION:

FAN 1989:75154

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 8706232	A1	19871022	WO 1987-JP236	19870414
	W: JP, US				
	RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
				JP 1986-84079	19860414
				JP 1986-99440	19860501
				JP 1986-182809	19860805
				JP 1986-309178	19861227
EP 346465	A1	19891220	EP 1987-902727	19870414	
EP 346465	B1	19930811			
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
				JP 1986-84079	19860414
				JP 1986-99440	19860501
				JP 1986-182809	19860805
				JP 1986-309178	19861227
AT 92927	E	19930815	AT 1987-902727	19870414	
			JP 1986-84079	19860414	
			JP 1986-99440	19860501	
			JP 1986-182809	19860805	
			JP 1986-309178	19861227	
			EP 1987-902727	19870414	
			WO 1987-JP236	19870414	
JP 07064852	B4	19950712	JP 1987-502318	19870414	
			JP 1986-84079	19860414	
			JP 1986-99440	19860501	
			JP 1986-182809	19860805	
			JP 1986-309178	19861227	
US 5084453	A	19920128	US 1988-265458	19881013	
			WO 1987-JP236	19870414	
US 5061794	A	19911029	US 1989-377086	19890710	
			JP 1986-84079	19860414	
			JP 1986-99440	19860501	
			JP 1986-309178	19861227	
			US 1987-38208	19870414	
US 5225406	A	19930706	US 1991-753943	19910903	
			US 1988-265458	19881013	
JP 07165740	A2	19950627	JP 1994-297861	19941107	

09/743483

JP 1987-502318 19870414
JP 1987-502318 19870414
WO 1987-JP236 19870414

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. I [R = (cyclic) lower alkyl, alkenyl (except for 1-carboxy-1-vinyl), alkynyl, aralkyl, Ph, etc.; Q = Q1 - Q3 wherein R1 = H, acetyl; R2 = H, CO₂H, carboxymethyl; Y = S, O; Z = S, O, imino group which may be substituted by a lower alkyl group], useful as antibiotics, were prepd. from II (R3 = H, protecting group; R4 = R; X = leaving group; R5 = H, protecting group) or III. Reaction of benzhydryl 7.beta.-[2-(1-benzhydryloxycarbonyl-1-methylethoxyimino)-2-(2-tritylaminothiazol-4-yl)acetamido]-3-iodomethyl-3-cephem-4-carboxylate (syn isomer) and 2-mercapto-5-[3,4-bis(2-methoxyethoxymethoxy)phenyl]-1,3,4-oxadiazole, followed by deprotection and workup, gave disodium 7.beta.-[2-(2-aminothiazol-4-yl)-2-(1-carboxylate-1-

methylethoxyimino)acetamido]-3-[5-(3,4-dihydroxyphenyl)-1,3,4-oxadiazol-2-yl]thiomethyl-3-cephem-4-carboxylate (syn isomer) (IV). IV in vitro exhibited a MIC of 0.1 .mu.g/mL against Escherichia coli NIHJ JC2.

IT 115295-44-8P 115356-96-2P

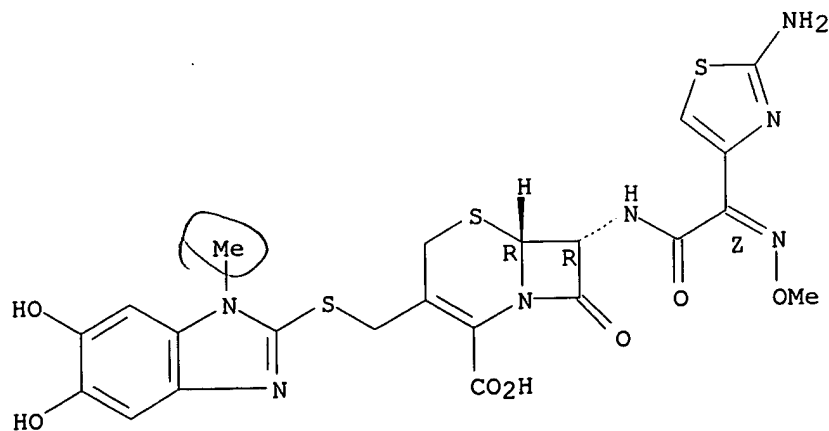
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. of, as antibiotic)

RN 115295-44-8 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,

7-[[(2-amino-4-thiazolyl) (methoxyimino) acetyl] amino]-3-[[(5,6-dihydroxy-1-methyl-1H-benzimidazol-2-yl) thio] methyl]-8-oxo-, [6R-[6.alpha.,7.beta.(Z)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 115356-96-2 CAPLUS

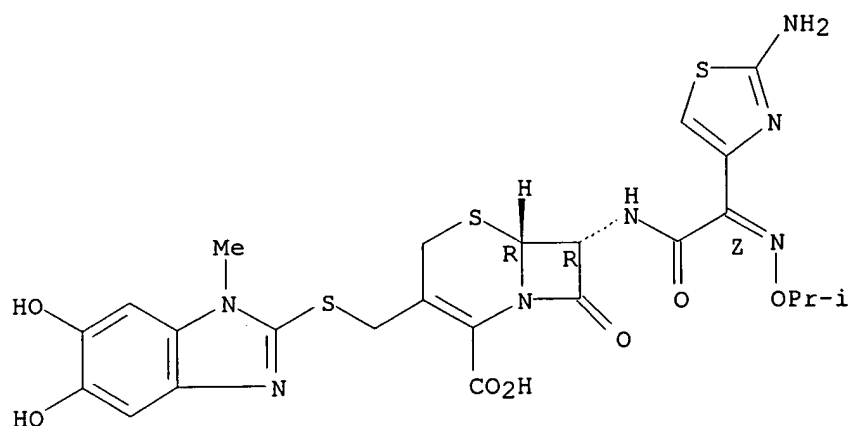
09/743483

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,
7-[[(2-amino-4-thiazolyl) [(1-methylethoxy) imino] acetyl] amino]-3-[[(5,6-
dihydroxy-1-methyl-1H-benzimidazol-2-yl) thio] methyl]-8-oxo-,
[6R-[6.alpha.,7.beta.(Z)]]-, mono(trifluoroacetate) (salt) (9CI) (CA
INDEX NAME)

CM 1

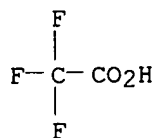
CRN 115356-95-1
CMF C24 H25 N7 O7 S3
CDES 1:6R2:6A,7B(Z)

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 76-05-1
CMF C2 H F3 O2



L4 ANSWER 16 OF 21 CAPLUS COPYRIGHT 2001 ACS
AN 1982:582387 CAPLUS
DN 97:182387
TI Bis(3-sulfopropyl) ethers and their use as alkylating agents for organic
bases
IN Kampf, Helmut
PA Agfa-Gevaert A.-G. , Fed. Rep. Ger.
SO Eur. Pat. Appl., 26 pp.
CODEN: EPXXDW
DT Patent

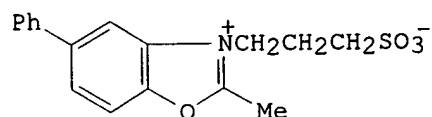
09/743483

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 55428	A1	19820707	EP 1981-110566	19811218
	EP 55428	B1	19840314		
	R: BE, CH, DE, FR, GB				
	DE 3049447	A1	19820729	DE 1980-3049447	19801230
	JP 57130966	A2	19820813	DE 1980-3049447	19801230
	JP 02054335	B4	19901121	JP 1981-206271	19811222
			DE 1980-3049447	19801230	

GI



I

AB XO3SCHRCHR1CHR2OCHR2CHR1CHRSO3X1 (X, X1 = H or org. or inorg. base cation;

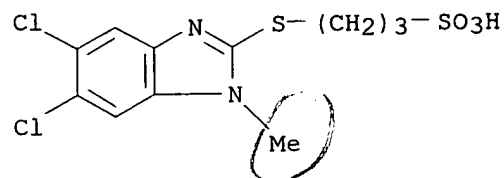
R, R1, R2 = H or Me) were prepd. Thus, ClCH2CH2CH2OH was etherified with H2SO4, and the ether refluxed with aq. Na2SO3 60 h to give (HO3SCH2CH2CH2)2O, which, e.g., with 2-methyl-5-phenylbenzoxazole (2 h, 165.degree.) gave I.

IT 83391-64-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and quaternization with sulfopropyl ether)

RN 83391-64-4 CAPLUS

CN 1-Propanesulfonic acid, 3-[(5,6-dichloro-1-methyl-1H-benzimidazol-2-yl)thio]- (9CI) (CA INDEX NAME)



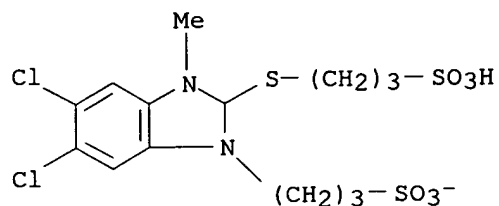
IT 83391-65-5P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 83391-65-5 CAPLUS

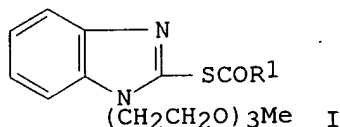
CN 1H-Benzimidazolium, 5,6-dichloro-1-methyl-3-(3-sulfopropyl)-2-[(3-sulfopropyl)thio]-, inner salt (9CI) (CA INDEX NAME)

09/743483



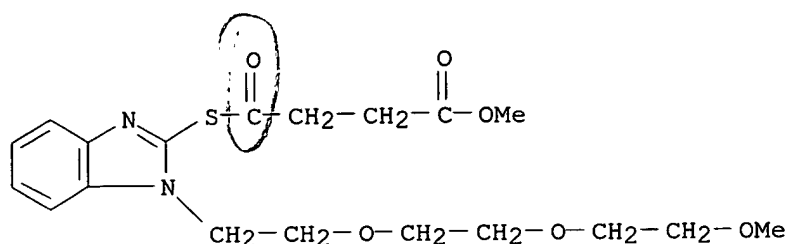
*** FRAGMENT DIAGRAM IS INCOMPLETE ***

L4 ANSWER 17 OF 21 CAPLUS COPYRIGHT 2001 ACS
AN 1980:566993 CAPLUS
DN 93:166993
TI Cesium fluoride-promoted reaction of aldehydes with S-(2-benzimidazolyl)alkanethioates. A new method for the preparation of enol esters
AU Mukaiyama, Teruaki; Murakami, Masahiro; Yamaguchi, Masahiko
CS Fac. Sci., Univ. Tokyo, Tokyo, 113, Japan
SO Chem. Lett. (1980), (5), 529-32
CODEN: CMLTAG; ISSN: 0366-7022
DT Journal
LA English
GI

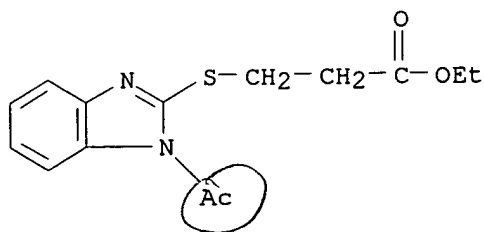


AB Treatment of RCHO (R = octyl, undecyl, PhCHMe, PhCH₂CH₂, etc.) with benzimidazolyl alkanethioates I (R₁ = Me, pentyl, CHMe₂, Ph, CH₂OCH₂Ph) in the presence of CsF in 6:1 DMF-C₆H₆ gave the corresponding enol esters in 63-97% yield. Anal. of the enol esters indicated that the cis isomer was the major product.
IT 75177-84-3
RL: RCT (Reactant)
(reaction of, with aldehydes, cesium fluoride promoted)
RN 75177-84-3 CAPLUS
CN Butanoic acid, 4-[[1-[2-[2-(2-methoxyethoxy)ethoxy]ethyl]-1H-benzimidazol-2-yl]thio]-4-oxo-, methyl ester (9CI) (CA INDEX NAME)

09/743483



L4 ANSWER 18 OF 21 CAPLUS COPYRIGHT 2001 ACS
AN 1977:601399 CAPLUS
DN 87:201399
TI Synthesis and some transformations of (2-imidazolyl- and
-benzimidazolylthio)propionic acids and their esters
AU Bagryi, A. K.; Galenko, G. F.; Kochergin, P. M.
CS Zaporozhe Med. Inst., Zaporozhe, USSR
SO Farm. Zh. (Kiev) (1975), 30(3), 17-20
CODEN: FRZKAP
DT Journal
LA Ukrainian
GI For diagram(s), see printed CA Issue.
AB 4,5-Diphenyl- and 4(5)-p-nitrophenyl-2-mercaptoimidazole and
2-mercaptobenzimidazoles (I; R = H; R₁ = R₂ = Ph; R₁ = H, R₂ = p-O₂NC₆H₄;
R₁R₂ = CH:CHCH:CH) reacted with BrCH₂CH₂CO₂R₃ (R₃ = H, Et) to give I (R =
CH₂CH₂CO₂R₃) (II); II (R₃ = H) were converted to II (R₃ = Me, Et) by
esterifying with R₃OH. II (R₃ = H) cyclized in refluxing Ac₂O to give
70.8-83.3% imidazo[2,1-b]thiazinones III (R₁ = R₂ = Ph; R₁ = H, R₂ =
p-O₂NC₆H₄); II (R₃ = Et) gave only the N-acetylated products under
identical conditions.
IT **56744-88-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 56744-88-8 CAPLUS
CN Propanoic acid, 3-[(1-acetyl-1H-benzimidazol-2-yl)thio]-, ethyl ester
(9CI) (CA INDEX NAME)



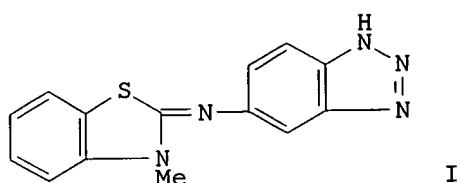
L4 ANSWER 19 OF 21 CAPLUS COPYRIGHT 2001 ACS
AN 1977:91752 CAPLUS
DN 86:91752
TI Condensation products
IN Ikeda, Tadashi; Iwamoto, Atsuo; Shishido, Tadao; Adachi, Keiichi; Fuseya,
Yoshiharu
PA Fuji Photo Film Co., Ltd., Japan
SO Ger. Offen., 70 pp.

09/743483

CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2617345	A1	19761104	DE 1976-2617345	19760421
				JP 1975-48435	19750421
	JP 51123223	A2	19761027	JP 1975-48435	19750421
	GB 1541936	A	19790314	GB 1976-16225	19760421
				JP 1975-48435	19750421

GI



AB Cyanine dyes and related compds. were prepd. in high yield and purity by dethiolation of a [(sulfoalkyl)thio]heterocyclic onium hydroxide with a compd. contg. an active amino, methylene, or methyl group. For example,

a
mixt. of 3-methylbenzothiazole-2-thione [2254-94-6] and propanesultone [1120-71-4] was heated to give anhyd. 3-methyl-2-[(3-sulfopropyl)thio]benzothiazolium hydroxide [61680-83-9] which when condensed with 5-aminobenzotriazole dihydrochloride [3663-27-2] gave 80%

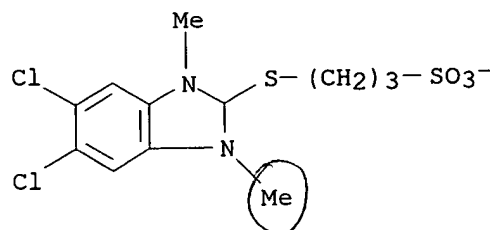
I
[61681-34-3].

IT **61680-86-2P**

RL: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of)

RN 61680-86-2. CAPLUS

CN 1H-Benzimidazolium, 5,6-dichloro-1,3-dimethyl-2-[(3-sulfopropyl)thio]-, inner salt (9CI) (CA INDEX NAME)



*** FRAGMENT DIAGRAM IS INCOMPLETE ***

L4 ANSWER 20 OF 21 CAPLUS COPYRIGHT 2001 ACS

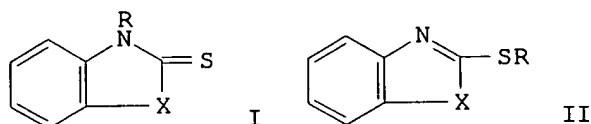
AN 1976:572661 CAPLUS

DN 85:172661

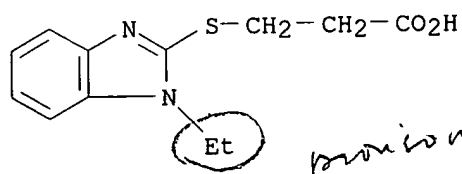
TI Herbicidal activity of azoline-2-thiones and their derivatives

09/743483

AU Tsoi, Z. I.; Loi, N. P.; Umarov, A. A.; Anan'eva, K. V.; Zav'yalova, L.
V.
CS Inst. Khim. Rastit. Veshchestv, Tashkent, USSR
SO Uzb. Biol. Zh. (1976), (4), 19-21
CODEN: UZBZAZ
DT Journal
LA Russian
GI



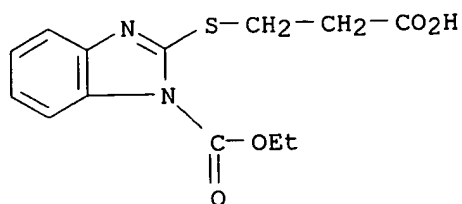
AB Of 34 3- and 2-substituted azoline-2-thiones I [R = H, CH:CH₂,
(CH₂)₂CO₂H,
(CH₂)₂CONH₂, (CH₂)₂CONHNH₂, CH:CClCO₂H, Et, CO₂Et, or Ph; X = S, O, or
NH] and II [R = Me, Et, Pr, Bu, iso-BuSO₂, (CH₂)₂CO₂H, (CH₂)₂CONH₂, etc.; X =
S, O, NH, NEt, or NCO₂Et] benzothiazoline-2-thione [149-30-4] was the
most effective herbicide. Attachment of alkyls and carboxyalkyls to O or S of
the azoline-2-thiones decreased their herbicidal activity. Of these
compds. 3-ethylbenzimidazoline-2-thione [39573-31-4] was the most active
deriv., which however had a low selectivity towards cotton.
IT 51099-68-4 51099-69-5
RL: AGR (Agricultural use); BAC (Biological activity or effector, except
adverse); BIOL (Biological study); USES (Uses)
(herbicidal activity of)
RN 51099-68-4 CAPLUS
CN Propanoic acid, 3-[(1-ethyl-1H-benzimidazol-2-yl)thio]- (9CI) (CA INDEX
NAME)



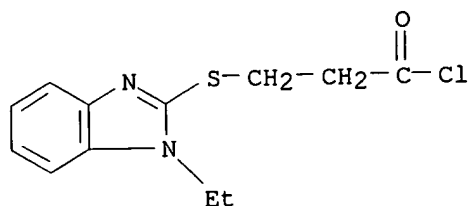
RN 51099-69-5 CAPLUS
CN 1H-Benzimidazole-1-carboxylic acid, 2-[(2-carboxyethyl)thio]-, ethyl
ester
(9CI) (CA INDEX NAME)

Q = Cl
J = C₃-C₆
no 103

09/743483

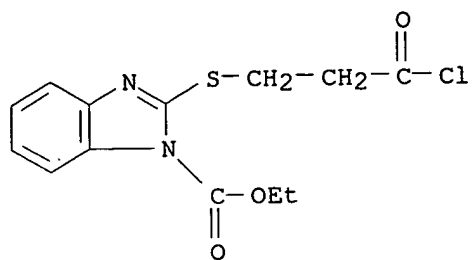


L4 ANSWER 21 OF 21 CAPLUS COPYRIGHT 2001 ACS
AN 1974:47905 CAPLUS
DN 80:47905
TI Cyclic thioamides in nucleophilic addition reactions. II. Reactions of thiazolidine-2-thione, benzimidazoline-2-thione, and its N-derivatives with acrylic acid and its chloride
AU Anan'eva, K. V.; Rozhkova, N. K.
CS Inst. Khim. Rastit. Veshchestv, Tashkent, USSR
SO Uzb. Khim. Zh. (1973), 17(5), 56-9
CODEN: UZKZAC
DT Journal
LA Russian
GI For diagram(s), see printed CA Issue.
AB Thiazoline I was obtained in 24% yield by addn. of CH₂:CHCO₂H to 2-thiazolidinethione, or by addn. of CH₂:COCl followed by hydrolysis of the resulting chloride. Benzimidazolines (II; R = H, Et, CO₂, Et, Ph) were obtained in 32-90% yields by analogous addns. of CH₂:CHCO₂H to the corresponding benzimidazolinethiones.
IT 51099-65-1P 51099-66-2P 51099-68-4P
51099-69-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 51099-65-1 CAPLUS
CN Propanoyl chloride, 3-[(1-ethyl-1H-benzimidazol-2-yl)thio]- (9CI) (CA INDEX NAME)

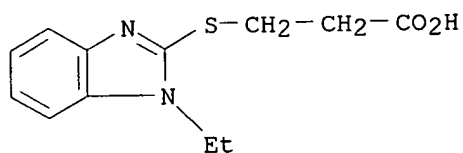


RN 51099-66-2 CAPLUS
CN 1H-Benzimidazole-1-carboxylic acid, 2-[(3-chloro-3-oxopropyl)thio]-, ethyl ester (9CI) (CA INDEX NAME)

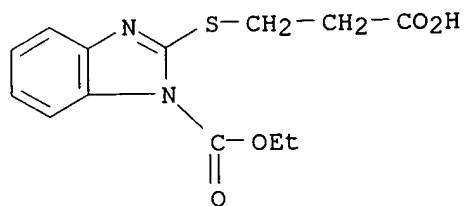
09/743483



RN 51099-68-4 CAPLUS
CN Propanoic acid, 3-[(1-ethyl-1H-benzimidazol-2-yl)thio]- (9CI) (CA INDEX NAME)



RN 51099-69-5 CAPLUS
CN 1H-Benzimidazole-1-carboxylic acid, 2-[(2-carboxyethyl)thio]-, ethyl ester
(9CI) (CA INDEX NAME)

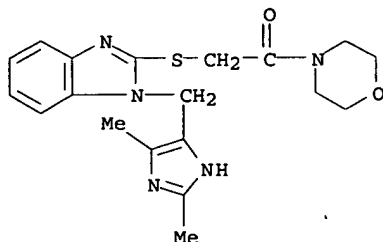


JP 1265089

09743483

=> d scan

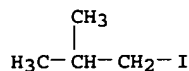
L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Morpholine, 4-[[[1-[(2,5-dimethyl-1H-imidazol-4-yl)methyl]-1H-benzimidazol-2-yl]thio]acetyl]- (9CI)
MF C19 H23 N5 O2 S



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

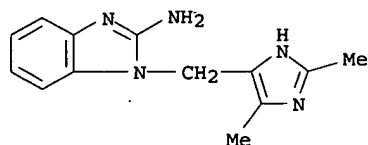
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):41

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Propane, 1-iodo-2-methyl- (6CI, 7CI, 8CI, 9CI)
MF C4 H9 I
CI COM



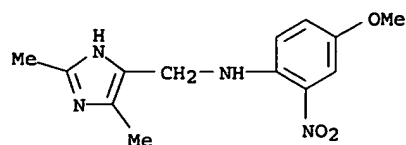
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 1H-Benzimidazol-2-amine, 1-[(2,5-dimethyl-1H-imidazol-4-yl)methyl]- (9CI)
MF C13 H15 N5



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

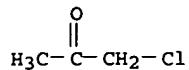
L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 1H-Imidazole-4-methanamine, N-(4-methoxy-2-nitrophenyl)-2,5-dimethyl- (9CI)
MF C13 H16 N4 O3



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

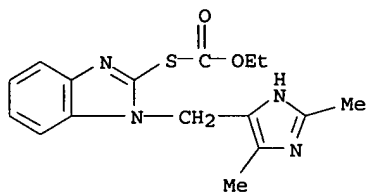
09743483

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 2-Propanone, 1-chloro- (8CI, 9CI)
MF C3 H5 Cl O
CI COM



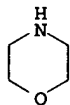
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Carbonothioic acid, S-[1-[(2,5-dimethyl-1H-imidazol-4-yl)methyl]-1H-benzimidazol-2-yl] O-ethyl ester (9CI)
MF C16 H18 N4 O2 S



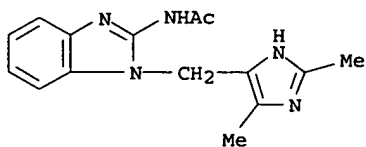
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Morpholine (8CI, 9CI)
MF C4 H9 N O
CI COM, RPS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

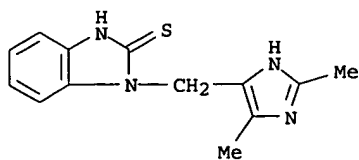
L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Acetamide, N-[1-[(2,5-dimethyl-1H-imidazol-4-yl)methyl]-1H-benzimidazol-2-yl]- (9CI)
MF C15 H17 N5 O



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

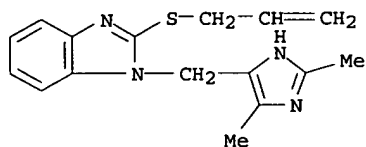
L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 2H-Benzimidazole-2-thione, 1-[(2,5-dimethyl-1H-imidazol-4-yl)methyl]-1,3-dihydro- (9CI)
MF C13 H14 N4 S

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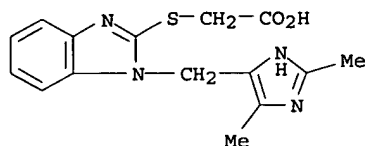
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 1H-Benzimidazole, 1-[(2,5-dimethyl-1H-imidazol-4-yl)methyl]-2-(2-propenylthio)- (9CI)
MF C16 H18 N4 S



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

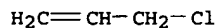
L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Acetic acid, [[1-[(2,5-dimethyl-1H-imidazol-4-yl)methyl]-1H-benzimidazol-2-yl]thio]- (9CI)
MF C15 H16 N4 O2 S



*A = alkyl; E = COOH.
J = solvent.
102 promiso out.*

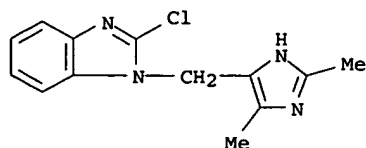
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 1-Propene, 3-chloro- (9CI)
MF C3 H5 Cl
CI COM



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

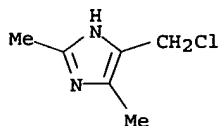
L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 1H-Benzimidazole, 2-chloro-1-[(2,5-dimethyl-1H-imidazol-4-yl)methyl]- (9CI)
MF C13 H13 Cl N4



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PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

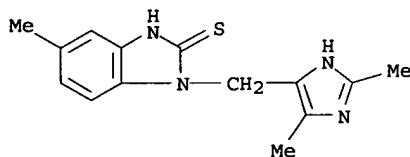
L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 1H-Imidazole, 4-(chloromethyl)-2,5-dimethyl-, monohydrochloride (9CI)
MF C6 H9 Cl N2 . Cl H



● HCl

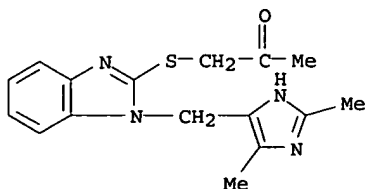
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 2H-Benzimidazole-2-thione, 1-[(2,5-dimethyl-1H-imidazol-4-yl)methyl]-1,3-dihydro-5-methyl- (9CI)
MF C14 H16 N4 S



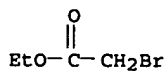
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 2-Propanone, 1-[[1-[(2,5-dimethyl-1H-imidazol-4-yl)methyl]-1H-benzimidazol-2-yl]thio]- (9CI)
MF C16 H18 N4 O S



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

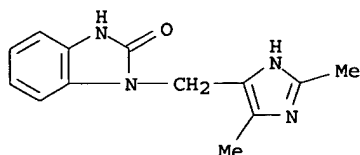
L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Acetic acid, bromo-, ethyl ester (6CI, 8CI, 9CI)
MF C4 H7 Br O2
CI COM



09743483

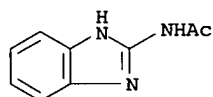
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 2H-Benzimidazol-2-one, 1-[(2,5-dimethyl-1H-imidazol-4-yl)methyl]-1,3-dihydro- (9CI)
MF C13 H14 N4 O



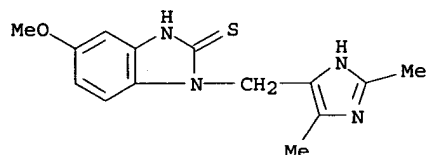
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Acetamide, N-1H-benzimidazol-2-yl- (9CI)
MF C9 H9 N3 O



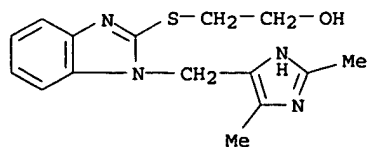
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 2H-Benzimidazole-2-thione, 1-[(2,5-dimethyl-1H-imidazol-4-yl)methyl]-1,3-dihydro-5-methoxy- (9CI)
MF C14 H16 N4 O S
CI COM



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Ethanol, 2-[[1-[(2,5-dimethyl-1H-imidazol-4-yl)methyl]-1H-benzimidazol-2-yl]thio]- (9CI)
MF C15 H18 N4 O S



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

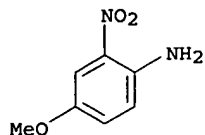
L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Benzenamine, 4-methoxy-2-nitro- (9CI)

09743483

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT

MF C7 H8 N2 O3

CI COM

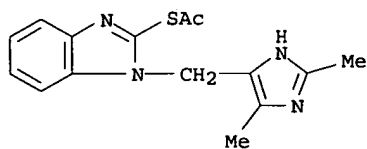


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN Ethanethioic acid, S-[1-[(2,5-dimethyl-1H-imidazol-4-yl)methyl]-1H-benzimidazol-2-yl] ester (9CI)

MF C15 H16 N4 O S



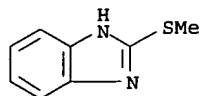
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN 1H-Benzimidazole, 2-(methylthio)- (9CI)

MF C8 H8 N2 S

CI COM

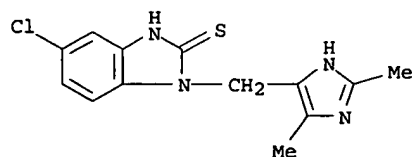


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN 2H-Benzimidazole-2-thione, 5-chloro-1-[(2,5-dimethyl-1H-imidazol-4-yl)methyl]-1,3-dihydro- (9CI)

MF C13 H13 Cl N4 S



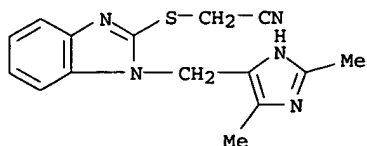
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN Acetonitrile, {[1-[(2,5-dimethyl-1H-imidazol-4-yl)methyl]-1H-benzimidazol-2-yl]thio}- (9CI)

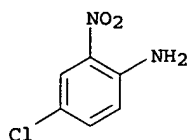
MF C15 H15 N5 S

09743483



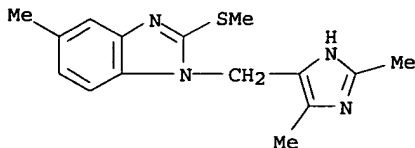
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Benzenamine, 4-chloro-2-nitro- (9CI)
MF C6 H5 Cl N2 O2
CI COM



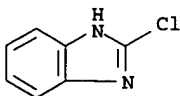
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 1H-Benzimidazole, 1-[(2,5-dimethyl-1H-imidazol-4-yl)methyl]-5-methyl-2-(methylthio)- (9CI)
MF C15 H18 N4 S
CI COM



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

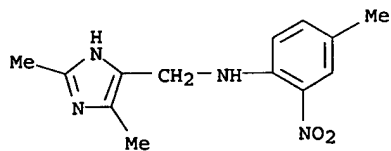
L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 1H-Benzimidazole, 2-chloro- (9CI)
MF C7 H5 Cl N2
CI COM



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

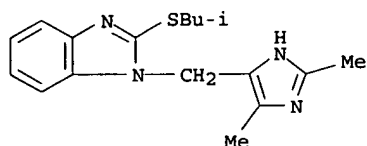
L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 1H-Imidazole-4-methanamine, 2,5-dimethyl-N-(4-methyl-2-nitrophenyl)- (9CI)
MF C13 H16 N4 O2

09743483



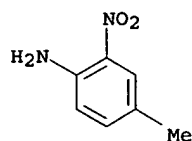
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 1H-Benzimidazole, 1-[(2,5-dimethyl-1H-imidazol-4-yl)methyl]-2-[(2-methylpropyl)thio]- (9CI)
MF C17 H22 N4 S



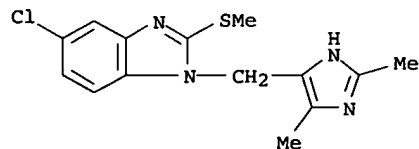
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Benzenamine, 4-methyl-2-nitro- (9CI)
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT
MF C7 H8 N2 O2
CI COM



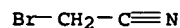
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 1H-Benzimidazole, 5-chloro-1-[(2,5-dimethyl-1H-imidazol-4-yl)methyl]-2-(methylthio)- (9CI)
MF C14 H15 Cl N4 S

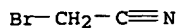


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Acetonitrile, bromo- (6CI, 7CI, 8CI, 9CI)
MF C2 H2 Br N
CI COM

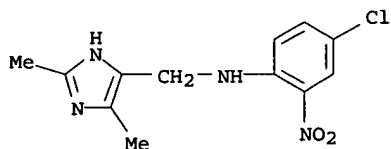


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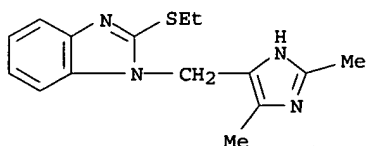
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 1H-Imidazole-4-methanamine, N-(4-chloro-2-nitrophenyl)-2,5-dimethyl- (9CI)
MF C12 H13 Cl N4 O2



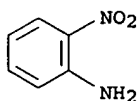
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 1H-Benzimidazole, 1-[(2,5-dimethyl-1H-imidazol-4-yl)methyl]-2-(ethylthio)- (9CI)
MF C15 H18 N4 S



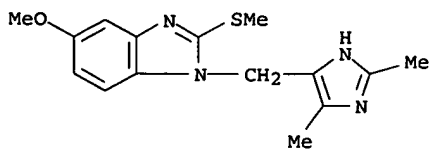
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Benzenamine, 2-nitro- (9CI)
MF C6 H6 N2 O2
CI COM



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

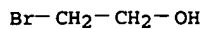
L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 1H-Benzimidazole, 1-[(2,5-dimethyl-1H-imidazol-4-yl)methyl]-5-methoxy-2-(methylthio)- (9CI)
MF C15 H18 N4 O S



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

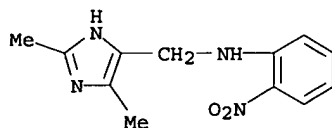
09743483

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Ethanol, 2-bromo- (6CI, 7CI, 8CI, 9CI)
MF C2 H5 Br O
CI COM



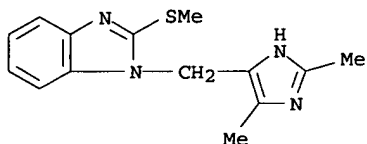
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 1H-Imidazole-4-methanamine, 2,5-dimethyl-N-(2-nitrophenyl)- (9CI)
MF C12 H14 N4 O2



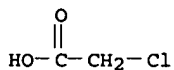
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 1H-Benzimidazole, 1-[(2,5-dimethyl-1H-imidazol-4-yl)methyl]-2-(methylthio)- (9CI)
MF C14 H16 N4 S



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 42 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Acetic acid, chloro- (8CI, 9CI)
MF C2 H3 Cl O2
CI COM



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT